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**PERENNIAL COTTON.**

Some important facts have recently been revealed relating to the discovery in Peru of a kind of Perennial or Tree Cotton, by Capt. R. C. Kendall, formerly of the U. S. Coast Survey. It appears that Capt. Kendall, in his travels, has discovered this new plant, the *Gossypium Arborium*, growing in Peru, and has succeeded in its cultivation in the Northern part of Maryland; and it is said that the soil and climate of a large portion of the Northern States are perfectly adapted to its successful culture. The most important facts that have come to our knowledge on the subject of this plant, are derived from a lecture delivered not long since at the Cooper Institute, New York City, by Capt. Kendall, who at the close of his lecture exhibited specimens of the new cotton, which are represented to compare favorably with the ordinary cotton staples of the Southern States. Undoubtedly, the great shock which is experienced in

the commercial and manufacturing worlds, caused by the suspension at this time of the supply of cotton, the product of the Cotton States of America, will lead to important developments of the capacity of other portions of the world to supply the deficiency so essential to the subsistence of a large number of the laboring population in the manufacturing districts of Europe and America.

England is now anxiously looking to every portion of her foreign dominions, capable of yielding cotton, for the supply of any deficiency that may grow out of the present political disturbances in this country. But it will be some time (if it ever can be done) before it will be possible for these countries to meet, to the full extent, these wants; not that a wide extent of these countries are not as well adapted to the growth of this staple as any portion of the United States, but from the want of capacity and industry of the natives inhabiting those regions.

China is too remote; besides seven-tenths of all the cotton produced in the vast empire of the Celestials, is a short staple; coarse fibre; and of a dingy white, quite unfit for the manufacture of any of the finer quality of goods, and consequently not adapted to the requirements of the English market. India is somewhat nearer, and cotton of a superior quality has been, and may, perhaps, be grown there. But there are facts and circumstances connected with the character and government of the people of India that will render any great supply from there, immediately, quite unreliable. Australia will doubtless one day afford a great deal of cotton, of a quality equaling the "Middling" Upland staples grown in our own States; but Southern Australia is at present a semi-wilderness, peo-

pled with a mixed population, little inclined to agricultural labor. Natal, to the eastward of Good Hope, will, after expending a vast sum of money, produce a fair upland cotton in sufficient quantity to supply a few mills. Loando, on the West Coast, will probably do something better; but to keep up a supply of laborers in this country would require constant effort, owing to the inroads made upon them by the terrible malaria which there prevails. Guiana, Demerara, Trinidad and Honduras will all produce cotton, but, so far as experiments have gone, not of the best quality. Egypt has produced cotton from an early period, yet to this day the supply from that country has been limited. Looking to Peru and Bolivia there is a cotton region of sufficient extent to furnish more cotton than England requires; but that region is beyond the possible grasp of English enterprise. Along the borders of unreliable rivers, coursing down the Pacific slope of the coast range, the Perennial Peruvian Cotton has been produced in small quantities. But as Capt. Kendall asserts, between the years 1851 and 1858 there was an average annual yield of cotton from the valley of the Chira of 6,000 bales of Perennial cotton, weighing one hundred and fifty pounds each, fully six-tenths being entirely of spontaneous growth.

His solution of the cotton supply question was presented in the following terms: The island of Jamaica, under judicious culture and energetic management, would afford three-tenths of the whole amount required by Great Britain. Two-tenths would have to be sought after and found in divers far-off corners of the world, leaving the remaining one-half to be gathered up for a few years, as best it may, from precarious sources, but ultimately to be supplied by the States of North America, where cotton has not heretofore been grown.

Startling and Utopian as this declaration may appear, continued the speaker, the study of cotton in all its economy for more than half an ordinary lifetime, with an actual practical experience in cotton growing for more than twenty years, has convinced me beyond the shadow of a doubt that the Perennial Cotton can be profitably grown in any territory possessing the requisite quality of soil for its natural development, where Indian Corn will mature its crop. There is a condition of soil far more indispensable to the successful culture of cotton, than any definite temperature of climate, my observations and experiments have proved. Two-thirds of the present Northern States of the Union possess this requisite of soil, several of them in an

eminent degree; and there is no well founded reason why they should not afford an unlimited supply of cotton, equal in quality to the best Southern staple, and of a clear profit to the producer of fifty per cent. above the average proceeds from the usual farm crops; and that, too, without materially lessening the breadth of land now devoted to grass and grain, or seriously interfering with the routine of farm economy as at present conducted.

The speaker also detailed a series of experiments made by him with the Peruvian Tree Cotton, both in its discovery and its culture. He claimed to have shown by actual, practical working of land, that while the Southern Cotton would, under the most advantageous circumstances, yield but \$200 per annum to a field hand, the Peruvian Tree Cotton would yield on Northern soil \$468. He knew the tree to be capable of producing 2,000 pounds to the acre, and it could be grown in places used for other purposes, often not interfering with other crops. On this point he said: The period is not very remote, when hedges, most efficient as fences, shall yield annual dividends of superior cotton; ornamental trees, blending the useful with the beautiful, shall repay ten-fold their cost and culture; when the rugged heights of the Hudson, the plains of New Jersey, the fertile valleys of the Keystone State, and the undulating prairies of the Great West, shall gleam in the sunlight, white as the winter drift with generous pods of democratic cotton.

He alluded to the skepticism of the world as to the possibility of the grape culture in the United States, the ignition of Lehigh coal, the utility of under-draining, or the use of the potato, and the triumphant surmounting of all obstacles, and predicted that the culture of Peruvian Cotton will ultimately meet with the same success. He introduced the following opinion of a Mississippi cotton planter of the availability of Peruvian Cotton:

"Perhaps one of the most striking instances where the utilitarianism of the age, ever ready to grasp the substantial benefits of every hint derived from the votaries of science, has been at fault, is shown in the fact that a cotton-bearing tree, producing annual crops in the greatest abundance, enduring without re-planting, through a series of years, yielding a fair crop in the third, and attaining its maximum in the sixth or seventh year of its growth, is now flourishing within 2,000 miles of the cotton fields of the United States, in a soil and climate similar to those of the Middle States of the Union, where

it has grown neglected for all practical purposes, only claiming the eyes of the savage, or occasionally employing his rude industry, from a period anterior, perhaps, to the far-off times when ancient Greece and Rome paid tribute to the cotton looms of India."

Such are the facts given us of this newly introduced plant. We wait with some interest for further experience in the development of this new enterprise in the various corn-growing States of the West.

[Written for the Valley Farmer.]

#### ABOUT MANURES.

It is not enough to cart your manure on the field. This may be done to get it out of the way; which is a most wretched policy. The grand thing is to *save* your manure; for the rains are constantly helping you away with it. So is the atmosphere, the very thing that prepares your manure, and fits it for the field. But, unless you see to it, you will lose the best part of it. I am now addressing myself to the uninitiated.

Every rain that comes, soaks your manure, and takes some of its strength (and that the best part of it) into the ground, until the ground becomes blue with the strength of it. Such ground, after the barn and manure are removed, will yield immensely for years. I have known such spots selected for garden spots. The great depth of richness is a support, and shows that the fertilizing principles of manure work upward. These principles are gases; we smell them in the dung-yard in warm weather, when they are escaping. This upward tendency is characteristic of the gases; but the soil will never permit them to depart: it has more strength to hold them than the atmosphere. In the dung-hill it is different. There they are constantly escaping, unless covered, a few inches, with ground; so that an old heap of manure, rotten as it is, has comparatively little effect. It has a rich name—old rotten manure—but it is not so rich as is supposed, as any man of close observation will know.

Then, every shower carries away some of the strength of your manure. Little rills of brown juice are seen to run from it: and what a path of rich growth they leave. You can trace these little paths from almost every barn. Will the most prejudiced deny this? Then why not prevent these rills. Because the *immediate* effect is not felt in the pocket, people won't believe; not even with such evidence before them: and, yet, it is the easiest thing in the world to test the matter.

Make experiments in manure, and carefully note the effect: not at a random glance; this will only tell you manure is good, a fact that you knew before. But you want to see the full effect: the real difference between manuring a piece of land, and the same quantity unmanured. You want to *measure* the grain or hay, and see how many more bushels manure will bring you; and then calculate the expense of the excess of labor in manuring your land, and strike the balance. That will tell you.

It is not only the *strength* of manure that benefits your crop. There are other things about manure that help. It mellowes the soil, especially if you add a little lime with it, or ashes; or, better, both. Now, a mellow soil will retain moisture in drouth. It will stand the heavy rains better, the long soaking rains; and the small showers will not run off, as they do on hard ground. But the loose soil will carry the little moisture straight to the roots. All these are aids, which are not generally considered. The ignorant farmer knows that rich soils (not always black soils, for some black soils are poor enough,) are mellow; and he knows that the rains and the drouth affect them little, whereas a crop on poor soil, is shrunk up by the heat and drowned by the rains.

We are not only to know that manures are good; but to what extent they are good. Dairying is a way of manuring land. It is this, as much as anything, that makes New York and parts of New England the improved soils they are; particularly in New York, which is the best dairying country on the continent. We have carefully noted the difference. Many farms have nearly doubled in value in ten years. The most unproductive have become comparatively fertile. We have called this a species of manuring. It is this only in a certain, but very interesting way. It is no more nor less than drawing the strength from the atmosphere. The grass is grown and used on the farm. Grass draws largely from the atmosphere, where the gases are held in solution. Part of this goes into the butter and cheese and pork of the dairy; the rest into the roots of the grasses and clover, where the plow turns them over and rots them, and into the manure of the dung-hill, whence they are carted on the farm. This, more than anything else, makes the State of New York what it is. Grazing is doing what negligent farming omits—it manures the land, and it does it effectually; it penetrates the soil: the long roots of clover do this.

A recent improvement is, spreading manure



on grass lands. This is a ready way of disposing of it; though some must necessarily be lost to the soil, unless earth is mixed with the manure: this holds the gases. But the atmosphere, first and last, gets a good deal of manure. It is the great source which vegetation draws from. There is a constant exhalation going on from the earth. Millions of barn-yards are contributing their strength to the atmosphere. And it is for the tillers of the soil to devise means how to secure the largest amount of this fertilizing principle. Some say plaster draws largely from the atmosphere. Rain and snow bring it down in certain quantities. Dew also. But the grasses and other plants draw more largely, perhaps, than anything we know of. This is the great fertilizing agent; and surpasses in extent any other mode of manuring. Is the West calculated for grazing; and to what extent? This should be understood; it is of vital consequence.

We would here take occasion to advise as to the mode of saving and applying manures. But the reader has doubtless had "line upon line, precept upon precept," and he would only turn away, as usual, and leave unheeded the admonition. It is so easy to be conservative; so risky, and withal so troublesome to try a new thing, especially when so much is to do otherwise. But, remember, manure is the only, *only* thing that will grow grass or grain. Not a spire will grow without manure, for the natural strength of the soil is manure as well as the dung on the dung-hill. It is the ammonia, potash, carbon, &c., which cause plants to grow. And, strictly, according to the amount of these in the soil (it matters not how they get there) will be the growth of the crop. On the desert a spire of grass never grows. Why? There is simply sand. There is not a particle of the ingredients of manure. And so it is always with the desert. But where the ingredients are found, vegetation must necessarily spring forth: and will any one deny it is not according to the strength of the soil? Look at the valleys of rivers. These have the washings of the surrounding soil—in fact are made up of them; and these washings always take the richest portion of the soil, leaving the sand, clay, and earthy portions. Hence what trees do we find by the "rivers of water!" What grain grows there! We mention these things on account of the great incredulity of farmers—farmers in general. There are some interesting exceptions; and these are the hope of agriculture?

F. G.

## RURAL LITERATURE.

ED. VALLEY FARMER: Sitting by my comfortable wood fire in the library, weather and tooth bound this dreary first of March, I bethought me that a little time might be spent, possibly not without profit, in jotting down a few ideas on the subject I have placed at the head of this sheet. I am under no special inspiration. The leaden sky, the sheeted ground and ice-clad trees without, though they have a weird aspect all their own, are not "aids to composition;" still less so is an occasional twinge in my lower jaw. For all of which I pray you make allowance and just consider what I would have written on a sunny day without the toothache.

Every profession, calling and occupation in life has, or is beginning to have, its literature. The divine has his theological library, his quarterly and his newspaper; the professor, his accumulated text or reference books, and his periodical; the merchant his magazine and his daily; the mechanic is bound to his intelligent brethren by the common tie of the *Scientific American*, and his home book-treasures in the shape of "My School and Schoolmasters," the *Life of Robert Stephenson*, and "Lardner's Lectures on Science and Art;" the chess player can refer to his stored shelves, and even the prize fighter to his sporting paper. I have among those piles of pamphlets in the corner quite a collection of Mower and Reaper, Nursery and Agricultural Implement Literature—the compilation of wayside gatherings.

But Farm Life, Country Life, can embrace a wider scope of observation and experience than any of these. Its universality, embracing the majority of all races and climes; its close contact with Nature in her inspiring beauty or sublimity, as changeful in her dress and moods as the spoiled but winning child of Fashion; its homely and hearty joys and sorrows—make it an attractive theme for the poet and the novelist. Its intimate relations with the varied forms of matter have made those relations an interesting and profitable study for the man of science. And, finally, it demands the knowledge of so many varied facts that only experience can gather, that another kind of writing has been needed to communicate them. Thus we may be said to have a three-fold literature—one sentimental, the product of the æsthetic part of our nature: one theoretical, reasoning from primary facts of science to logical conclusions; and one practical, stating facts of experience.

1. Under the first head I rank many masterpieces of literature. Nothing in our own lan-



guage can exceed in beauty, tenderness and truth these songs and tales from forest, farm-house and fields. Among them let me name a few: Take for instance: "The Complete Angler," of Izaak Walton, and I will venture that outside of the New Testament you will not find a book with more of cheerful Christianity; the "Seasons," of Thompson, are full of the beauties of the passing year; Goldsmith's "Vicar of Wakefield" and his "Deserted Village," are favorites wherever the English language is read; Gray's "Elegy" has been called, and to my mind is, the most finished poem in the language; Burn's "Cotter's Saturday Night" is hardly less attractive; Cowper's "Task," Grahame's "Sabbath," Bloomfield's "Farmer's Boy," Crabbe's "Village," "The Recreations of Christopher North," "The May Queen" and "Gardener's Daughter," of Tennyson, have each and all their peculiar and wonderful beauties. And this illustrious roll is but a sample of what has been written by English rural writers—I say nothing of writers in other tongues.

And among our own beloved American literature we may point with pride to such gems as Irving's "Legend of Sleepy Hollow," Bryant's "Death of the Flowers" and "March," Longfellow's "Evangeline," and last but not least to Whittier's "Maud Muller," which is nearly perfect in its idyllic grace.

2. But, turning from the ornamental to the useful, let us no longer linger over these pleasant themes. The next species of rural literature to be considered is the theoretical or logical. I call it theoretical or logical because it takes an *a priori* method, recommending a certain agricultural process because reasoned out from known scientific facts. Some of the most valuable literature comes under this head: Liebig's "Agricultural Chemistry," Johnston's "Elements of Agricultural Chemistry and Geology," Norton's "Scientific Agriculture," Lindley's "Theory of Horticulture," Darlington's "Agricultural Botany," Downing's "Landscape Gardening," &c., are examples; though the two latter, in some respects, belong to the next class. These are books of principles rather than of facts of immediate use. A few periodicals in the old world belong under the same head. Americans, as a general rule, are too practical to be thorough; too impatient of results to be profitably scientific: consequently we have few books, and fewer periodicals, which treat of agricultural and kindred topics in as thorough a manner as they deserve. Horticulturists discuss topics long and wearisomely, that a single scientific fact

ought to decide at once. *The American mental field needs sub-soiling*—we have skinned the surface long enough.

3. A third and large class of rural literature is the practical, which deals largely with facts and little with principles. It collects and disseminates facts of unequal value, treated in a more or less scientific manner. One book will be full of "old wives' tales," another grounded upon fixed principles of science; one will contain a large amount of vague speculation, which cannot be called science, and a small quantity of badly digested facts; another, taking an entirely positive view, will confine itself to a careful exposition and study of reliable facts in the experience of practical men. Such books often come near the truth. Under this third head comes our increasing library of fruit books, horse, cattle, sheep, swine, poultry, bee books and many others; and also the many, and in many respects excellent, periodicals for our rural population which have so multiplied and increased in circulation during the last ten years.

All this literature, imaginative, scientific and practical, is having a vast effect on our rural mind, and should be all of it fostered and encouraged. Our agricultural papers already make good progress. Youatt, Dadd, and Downing can be found in many farm-houses. Occasionally one sees a little read book on agricultural science. But there remains perhaps something yet more important. It is to place in our country homes an imaginative literature which will throw more romance and poetry over country life, and teach to the sons and daughters of our farmers the felicity of their position. To this end we should encourage and extend the reading of such productions as I have mentioned under my first heading; showing, as they do, how much beauty and even sublimity hang around the daily walk of the farmer. This I think would divest country life of the hard prosaic character it so often assumes, and which makes it so distasteful to youthful aspiration and love of the noble and beautiful.

It would arouse the sensibilities to those religious influences, in respect to which says Theodore Parker: "The farmer seems to stand on the very top of the world. The laws of nature are at work for him. For him the sun shines and the rain falls. The earth grows warm to receive his seed; the dew moistens it; the blade springs up and grows, he knows not how; while all the stars come forth to keep watch over his rising corn. There is no second cause between him and the Soul of all. Every thing he looks on, from the earliest flowers of spring to the austere grandeur of a winter sky, at night, is the work of God's hand. FARMER FREEMAN.

[Written for the Valley Farmer.]

### On the Cultivation of Locust Timber.

There is now a desire in some sections to cultivate timber trees. Perhaps some of the readers of the *Valley Farmer* would be willing to engage in the culture of them if they knew how to do so economically and successfully. To such I will impart such information as will enable them to raise a large quantity of Black Locust with but little labor.

The first move, is to procure the seed, which may be had before the 15th of May, as the seed of the Black Locust hangs on until after leaf. Select a piece of rolling land with a stiff clay sub-soil, with from 3 to 9 inches of loam; put it in about the same order as for corn, and free of clods, as they may break down the young plants, which are very easily destroyed, until they attain 10 or 12 inches high. They may be killed by frost at that height.

The Locust seed should be planted with corn—every third row, Locusts—and in every hill of that row drop 8 or 10 seeds, and cover them with the hoe two inches deep and work them carefully the first year. Plant corn the second year between the Locusts; the third year sow rye or oats. By that time nothing more will grow on the ground but grass or weeds.

The young trees should never be thinned; nature will perform that operation in due time. If the young trees are thinned out with the ax, the borer will injure or perhaps destroy them, but when let grow as thick on the ground as it is possible for them to thrive, the borer never injures them to my knowledge. I saw a field of 20 acres of Locust trees of 10 years growth, remarkably thrifty and free from the effects of the borer. I examined the same field 10 years after, when the borer had made sad havoc with them. The owner informed me that he thought the trees stood too thickly and put the axmen at work on them. He should have cut them rather and he would have had a better field of trees than the first planting.

The Black Locust is like red clover, it never needs sowing but once, cut them in the winter, and they will come as thick as a cane brake next spring.

In 1838 I planted 17 acres of Locusts, and in 11 years I calculated I had posts sufficient to fence my entire farm of 375 acres. A large portion of my trees would make four rails to the cut, or three fence posts. There is no more beautiful sight on a farm than a Locust grove in bloom, besides a tribute to the bees.

It is a matter of question and doubt which is

the most durable timber, Red Cedar or Locust. I think there is no comparison, and let me cite just two instances: The ties of a railroad in Kentucky were laid down, in 1833, of Red Cedar and Black Locust. They were taken up and new ones put down in 1846 or '47. The Cedar was worthless, and the Locust apparently sound, and then better than new oak ties, and were bought up by the farmers for fence posts. I owned a Locust post and rail fence made in 1818. About 20 years ago I re-set the same fence, and 18 months since I rode along it, and could see no change, not a post rotted off or one propped up.

Locust seed requires to be soaked in boiling water four to six days before it will vegetate. Seed may remain in water ten days before planting. S.

Florissant, St. Louis Co., Mo.

### A Cheap and Good Evaporator for Making Syrup from the Chinese Sugar Cane.

ED. VALLEY FARMER: Get your sheets (copper); have a tinner put them together *sidewise*, making a large sheet 5x10 feet square; make a box of 1½ inch plank, six inches high, four feet six inches wide, and nine feet eight inches long, the corners being put together with strips of cloth between and well nailed; lay your sheet of copper on the box (*without a bottom*), and after carefully laying strips of cloth on the edges all around, tack the copper on with three-penny nails (or, what is a little better, 12 oz. tacks); nail it on smooth and strong, turning the copper up a little around the edges of the box, and tack the edges also.

The box being done, with a *copper bottom*—get strips of board two inches wide, ¾ inch thick, and long enough to go across the inside of the box, less five inches, say four feet one inch long; lay them across the box on the copper, 5½ inches apart, leaving alternately a space first at one end of a stick or strip, next at the other end, and so on till you have nearly twenty strips across the box on the inside 5½ inches apart, with a passage around the end of each strip, the same width as between the strips, thus making a road for the sap from one end of the pan or box to the other across back and forth alternately, around opposite ends of each strip.

The strips being placed the exact distance each way, and being tacked fast, turn the pan up and have an ax or heavy hammer, held against the strips; tack them fast by nailing through the copper, with tacks or nails as for the box.

This being done, properly, you have a pan 4½ x 9 feet 8 inches, with strips or ribs across the

inside, so that you may run a skimmer of the proper width back and forth across the pan and around the ends of the strips, and take all the scum that may arise in boiling; the skimmer should be made to fit the width of the spaces between the strips.

Then set the pan on the arch, so that the front end of the pan is one inch, or a little less, higher than the back end—the sides being level with each other—and make the inside of your arch but three feet four to six inches wide, so that there will be a space on each side of your pan eight or ten inches wide that will not boil; on this the scum will stand for skimming. Your vat for holding the sap will stand on the front or highest end of your boiler, and the spout into your cooler will be from the hind or lower end of the boiler.

Experience will teach the rest.

### TOP DRESSING GRASS LANDS.

Z. B. in *Boston Cultivator* says:

Last summer, soon after haying, I spread a portion of manure upon a gravelly knoll, from which the Timothy was rapidly disappearing. At the close of the season it was the most prevailing grass upon the ground, having grown up and spread out over the other grasses so abundantly that it had the appearance of a green spot in spring. By the side of it stood the brown, frost-bitten red-top and "spear grass," in striking contrast with the manured portion. The manure applied was made by yarding my cattle during summer under my barn, with a foot of loam and muck on the bottom.—This was plowed once in two weeks. A better top-dressing one need not ask for. With the experience I have had, and the observations I here made, I would not apply top-dressing late in the fall, nor in the spring, unless there is but little grass on the ground besides Timothy and clover. Better to put it on soon after haying, and just before a rain.

**HOME-MADE BONE MANURE.**—A. F. G., of West Gardiner, Me., writes to the *American Agriculturist* that he makes a good bone manure thus:—A kettle holding a barrel or more, which is kept for boiling roots for stock is filled with bones, and caustic lye poured in to cover them. A gentle fire is built for two or three successive days, to barely warm the liquor through. In a week the bones become soft and fine. The mass obtained from one barrel of bones is then mixed well with about three loads of muck, the leached ashes from which the lye was obtained, being mixed with the heap. After lying a while for the muck to partly decompose, the fertilizer is ready for use and produces good effects.

### MOLE DRAINS vs. OPEN DITCHES.

C. D. Bragdon, writing to the *Rural New Yorker*, thus discourseth:

I stopped at Champaign and spent the Sabbath with Hon. M. L. Dunlap, editor of the *Illinois Farmer*; agriculturist and horticulturist, theoretically and practically. Have a good time, as I always do here. The soil is soft and oozy, but nevertheless we traverse the domain—both farm and nursery.

#### OPEN DITCHES vs. MOLE DRAINS.

Friend Dunlap will make no more open ditches on his premises. "Pat" got a job in 1860, and he was the kind of a mole drain for D., as he told me then; but last fall the mole man came along and put in a mole drain along side the ditch, three feet below the surface. The ditch was soon dry, and the influence of the mole extended much further, either side, than that of the ditch. The ditch was four rods from the mole, and yet it was drained dry. Another thing gained. By running this single mole drain through the centre of the slough, he secures living water for his stock the year round.

Whereas he had less confidence in the utility of the mole drainer than some others, now he has more, when the sub-soil is a stiff clay.

Last fall I conversed with D. F. Kinney, of Rock Island, on the subject of mole drains. He had them on his place, and said he found that when they had been put in on plowed land they had failed, having filled up; but where the surface was a sward he had no trouble. Asking Mr. D. if he had any such experience, he said that it was sometimes the case, but it was due more to the mal-practice of the parties working the mole. The mole runs easier, and the drain can be made more rapidly in proportion as it runs nearer the surface. Hence, a dishonest operator may, and sometimes does, destroy his own work by dishonest practice. If the mole be run deep enough—three to three and a half feet deep in a stiff clay—it will be effectual, even though the surface be "as mellow as an ash heap."

**TIMOTHY GRASS IN SOUTHERN OHIO.**—I have had about a hundred acres in grass on my farm, for the last twenty years, and testing its value in dollars and cents by close calculation of weight, find Timothy the most profitable of grasses. My cattle prefer it to any other grown in this climate. I find that every kind of stock that feeds on grass, works after the Timothy more than the other grasses, and they pull it up and destroy it, and other grasses and weeds take its place. I can cut my grass with a mowing machine for fifty cents per acre; a good yield will average two tons per acre. Baling it costs \$1.50



per ton; the whole cost of preparing one acre of Timothy grass for market is \$5.50 per acre. My crop of hay has sold, for the last three or four years, at the rate of \$15 and \$16 per ton; two tons per acre, shows a profit of \$24 per acre.

—W. D. Kelley, in *Ohio Farmer*.

### GRAY OR POWDER WILLOW.

BY K. H. FELL.

What, let me ask, is the great distinguishing deficiency, that is apparent to any one, in our prairie homes of the West? All agree in saying that it is the *lack of timber properly distributed*.

Then the question arises how can that be remedied? We have been trying experiments for the last twenty years with locust and some other kinds of trees, but with no satisfactory results.

Now I propose that we try the Gray or Powder Willow. It is more easily produced than any of the kinds heretofore tried, is better adapted to all localities, is a more rapid grower, is more beautiful, will not breed or harbor vermin, will not spread by suckers, and lastly is equal in value to any other fast grower that has been tried, and I think superior. All that is necessary is to stick strips of the willow in the ground, and it will grow, and that rapidly. It is best adapted in its habits to low and wet grounds, but will grow in any kind of soil. Out of one thousand slips there is no need of losing any; *they all grow*. Slips one foot long, stuck half way into the ground, will grow in three years from fifteen to twenty feet high, and at the end of seven to ten years will be large enough to cut into three rail cuts, the first making four rails, the second, two, and the last one is a pole. The cutting of it down does not destroy it, but only infuses a more rapid and vigorous second growth. When once the ground is set with it, it is a permanent thing. It matters not how often it is cut off, it continues to throw up new shoots. Then there is no kind of wood with which I am acquainted that splits with so much ease, and so straightly, as this willow. The rails are easily handled, because the wood is light; and they will last *if kept off the ground, from thirty to forty years*. There is no decay to them when kept off the ground. The bleaching of the rains and vicissitudes of weather will gradually lessen them in size, and they will eventually become too small for service as rails, *but not until they have served out their full time*. When it comes in contact with the ground it is not a hardy wood. It is also valuable for protection, shelter or screen for vines; also for boards, shingles and fuel. It is quite equal (I am told) to any of the light woods for fuel.

It is astonishing on what a small amount of

ground enough willows can be grown to build and keep up the fences of a farm, and at the same time supply the house with fuel. In many parts of Europe they grow it for fuel, putting it on the lines between tracts owned by different persons, and in low and marshy places. It is the first thing to throw out its beautiful green leaves in the spring, and is the last to part with them in autumn or early winter. The tree grows straight, and limbs are upright; does not spread about like many other trees, but is really a thing of beauty. From my earliest boyhood it has been familiar to me, and I never look upon it but with renewed pleasure.

I hope the farmers of McLean, and all the prairie regions of the West, may be induced to grow this Willow, and thereby beautify their homes.

[Written for the Valley Farmer.]

### Hints on the Culture of Cane.

*First, Soil*—Two years' experience has convinced me that light sandy soil has produced lighter colored molasses than that grown on dark loam.

*Planting*—Put from 12 to 20 seeds in a hill, cover half to one inch deep, leaving the seed not much below the surface.

*Cultivation*—Should be clean, and stand from 6 to 12 stalks in a hill—a full stand will make smaller stalks, less suckers, and the best molasses. I never mind suckers; and, in fine, have but few when I have a full stand. I plant from 36 to 40 inches apart each way.

I used pans to boil in; 2 pans 9 feet long, sides of pine, No. 16 sheet iron bottoms. With good fuel, 75 to 80 gallons in twenty-four hours can be made, about the amount of sap which a 12 inch high iron mill will compress. I use one of Brown, Dimock & Co.'s Mills, made at Quincy; cost, \$65.

*Boiling Sap*—Put sap to the depth of 6 inches in the pans, and just after it scalds, before it boils, take a clean shovel of sheet iron and run through, slowly scraping the bottom of the pan, and you will get a good yield of dark jelly, the specific gravity of which will not allow it to rise. If you will take out this substance it will improve the quality of your stock in taste and shade, and you will not find burnt scales on the bottom of your pans. I run my pans continually without washing from Monday morning to Saturday night, and they are bright. This last idea on boiling has prompted me to write this—try it and improve your stock. H.

Richfield, Ill., March, 1862.

[Written for the Valley Farmer.]

**PEAS.**

Peas should be more cultivated: not only for the grain, but as manure. The poorest soil, when plaster is used, will grow peas. We have sown peas where grass wouldn't grow—a sterile, naked soil—and, to the surprise of all, have had a cloud of peas cover the ground. The crop, in its full maturity, if plowed under, will make a fair soil, so that grass or grain may be grown. If repeated for several years, fertility is the result. We think the pea equal, if not superior to clover, in this respect. But plaster is necessary to aid it. Our experience tells us it is indispensable. Roll your seed in plaster (moistening it first) before you sow it, and plaster it afterward as soon as the blade appears.

But the pea has an enemy, which discourages its cultivation, the "pea bug" (*Bruchus Pisi*). This bug deposits its egg in the pod when the pea is in blossom. A small speck is visible; so small it is scarcely noticed. This is the larva. But it affects the pea little till after it has ripened. It then begins to consume the berry; and, by spring, a part of it is gone; sometimes nearly half. Upon examining the pea, a small beetle will be found in it. This leaves it in the spring with the first warm weather, to continue its depredations on the growing plant, especially if the plant flowers early. A late sowing will generally be free from the insect; but the straw, like all late-sown grains, is apt to suffer, and thus affect the crop.

We have always found an elevated soil most favorable to peas—not the straw, but the berry. Such soils, especially if manures cannot be got to them, are favorable to plowing in the crop. The advantage of peas over clover in this respect is: you may plow in two crops of peas, whereas clover will admit of but one. Does not every one see at a glance the benefit of peas as a means of manuring soil that is inaccessible to the barn-yard or compost heap?

In Europe, hogs are fattened, almost wholly, with peas, whereas in this country Indian corn is preferred, which doubtless makes the sweeter pork, as the bitter in the pea is an objection: at least we have heard it urged. F. G.

The most successful farmer, says the *N. E. Farmer*, is not the man who cultivates the greatest number of acres, but he who applies the most of thought to his business. The farmer who plods wearily on in the track of his predecessors, unmindful of the improvements, and disregarding of the capabilities of agriculture, is certain to be left behind.

**OSIER OR BASKET WILLOW.**

With your permission I will give a few facts relative to the cultivation, growth, market and profits of the osier willow.

It is now five years since I commenced the growing of the willow, and I am satisfied that it pays better than any other crop. There are thousands of acres that are now lying useless, that might yield from two to three tons per acre, which now sells for \$100 per ton, say \$200 per acre, or more, cash. Now what is to be done? I will tell you: Ditch your land, if it is too wet for good grass, then plow and prepare it as you would for a crop of corn, and do it well, as it has to be done but once. Procure your cuttings of the best kind, the Purple or *Salix Viminalis*, set the rows three feet apart, cuttings one foot in the row; plant by a line; hoe them well the first year to give them a good start. Your first crop will be worth but little, yet will pay the expenses if you have a basket maker to work it up; the second year will yield about one-third of a crop; and the third year you may expect a pretty good crop, and after that a crop as long as wood grows.

I will now give you the figures, say on one acre: Hoeing in June, well done, \$5; cutting and binding, \$12 (this may be done betwixt Nov. and April); setting in water till they will peel, \$12; peeling by machine, \$20; freight, \$10; commission, truck, storage, etc., \$10. Total—\$69. Now call the crop, say two tons per acre, at four cents per pound, \$160—which is \$40 less than they fetch this year, and from \$80 to \$90 less than I have ever sold any before this year—and this leaves \$91 for the use of one acre, ready cash; and when I consider that this is only one branch of farming, and that almost the whole can be done when other branches do not crowd, and that it is also a quick sale cash business, at much higher figures than the above, I do wonder that there are not more farmers ready to commence the business.

—[Field Notes. J. JEWELL, Oberlin, Ohio.

[Written for the Valley Farmer.]

**SUB-SOILING.**

"Plow deep, while sluggards sleep."—FRANKLIN.

The advantages of sub-soiling have already become a fixed fact with most, if not all, of our practical farmers. They know by experience, many of them, that inverting the surface ten or twelve inches in depth produces the following happy results:

1. The seeds of all weeds being put so deep under the soil that they do not appear soon enough to injure the crop.
2. Stirring the soil deeply, enabling it the better to withstand drouth; giving the roots an opportunity of running deep for moisture.
3. When there is a superabundance of wet, the advantages of sub-soiling are apparent, as the moisture will more readily settle from the surface.

And last, though not least, the yield of produce is from ten to twenty per cent. greater than can be obtained on old soils by surface culture.

I have before me the experience of some of our best farmers in this State on this subject, derived from tests on old plowed fields of 15 to 23 years. I will give the extremes on corn, wheat and oats: on corn, from 15 to 25 bushels more per acre; on wheat, from 7 to 10 bushels; on oats, from 10 to 18 bushels per acre. Now suppose a farmer should sub-soil 80 acres old prairie for corn, and make only 10 bushels per acre more than if he used the surface plow; he would harvest 800 bushels more corn, which at 25 cts. per bushel would amount to \$200, more than the cost of sub-soiling, leaving the land in the right condition for an increased crop of oats, and then wheat with only surface plowing.

With these remarks on the beneficial results, we will notice briefly the modes now adopted by the few who have found that their titles to the soil were good below 5 or 6 inches. 1. Some use two teams, running one common plow in the same furrow, or plow two furrows in depth. 2. Some use the Michigan sub-soil plow, which is similar in its work to the former mode. 3. Some use a large single plow that will run ten inches in depth, drawn by three horses. I consider all these modes as doing the work imperfectly, as by neither is there a perfect inversion of the soil. Still, imperfect as they are, they will all pay better than the continual six inch plowing.

I saw a plow last week invented by a practical farmer, N. F. Burton, of Plymouth, Ill., and patented last October. (See Patent Book, 1861, No. 2564). It is a perfect success as a sub-soil plow. It consists of a surface and sub-soil plow running side by side. The surface one running on the land side just behind the sub-soil plow, which turns the sub-soil at any required depth over the surface soil. The team has a good path, the bottom of the surface furrow, which is an important item; as well the complete inversion of the soil. When the importance of any work is as apparent as that of sub-soiling, especially old fields, it is quite essential that we use the best implement to perform the work. Two yoke of oxen, with a boy to drive, is all that is required to run the Burton Plow, as it runs on wheels and holds itself.

H.

Richfield, Ill., March, 1862.

Beware of little expenses, a small leak will sink a great ship.

[Written for the Valley Farmer.]

### WHAT FARMERS SHOULD DO.

They should cultivate a love for the beautiful. Their calling fits them for this. The farmer is much out of doors, under the influences of Nature. All that is poetical in Nature appeals to his senses. The mechanic has not these advantages. He has not the leisure which the farmer has in winter—especially the long winter nights—which he can devote to the improvement of his mind. There are also other leisure days, and rainy days.

An ignorant farmer is one of the most miserable of clodhoppers. He is worse than the poorest mechanic. The mechanic must have some wit, or his work will not sell: a fool cannot be a mechanic. But the veriest blockhead will do for some kinds of work on the farm.

Now it becomes farmers to keep out of this degradation. Elevate the mind, and you lift a man at once out of the mud. A man has influence according to his mind; and mind (or knowledge, rather,) is acquired. Among our most distinguished citizens are farmers. They are the solid, the reliable men. They are the lords of the earth proper—gentlemen, in the better sense of the term.

A mere money maker is a pest; a sponge; and he is hated. His heart has become hard and unsympathetic. Who finds sympathy with a miser? Such a man is cold towards his fellow men, stern in his family, and an enemy to himself. He loves not even himself: only his money. Let the rays of the beautiful shine upon such a man, and it will thaw him—for its influence is genial: that is its nature. It has reclaimed thousands of men. A man without education is what every reader of the *Farmer* dreads to be. He would rather have the genial influences to surround him and inspire him. The man who turns his eye at the sunset, when the heavens are illumined, or at the stars, or the waving grain; who stops to listen to the first bird of spring, and bends down to greet the first flower; who feels a joy at these things—is a happier man than he who sees nothing in them; who sees only profit in grain, and cares not for the music of bird or brook. Such a man's education has been sadly neglected. It is not too late yet to begin. The germ is always there. It only needs quickening, cultivating.

We wish to see our sons and daughters keep up with other's sons and daughters. They are as well attired; have their gold watches; horses and carriages. But, if with this they have a vulgar



mind, what then? Society tolerates them. It does not desire them. They marry their equals—money without brains. It has long been a disgrace for a man to be without education. The man himself, if he has any intelligence, is ashamed of it. Now, education does not mean the arithmetic; nor how to write your name. For all that a man may count up on his fingers, or make his mark (X). Such men may get rich. That is all.

There is a charm in music which the hardest heart sometimes will feel. And every such influence makes a man better; its nature, as we have said, is genial. So it is in reading choice books, such as Addison's Spectator, Washington Irving's Text Book, Robinson Crusoe, Gulliver's Travels, our best school readers, poetry, romance, especially the romances of Sir Walter Scott, history, botany, astronomy, and many other sources. These have an influence—which is universal—upon men, making of mankind a family of brothers, and not moles working in the dark.

What a blessing to know how to read. How much greater a blessing to fully understand and feel the influence of what you read. It is no more nor less than to know and enjoy what the best and greatest men have enjoyed. And what is that? All that is amiable, and beautiful, and happyfying in the world. To cultivate a man, is to bring him to this point—to make him happy. The ignorant, the uneducated man does not know this—or only by theory. He looks upon the cultivated man as conceited and on stilts—that he has not that warm honest heart he has. It is because he does not appreciate education. There are fops, pedants, it is true. These are but the counterfeit of the true man. These without education would have been—we dare hardly say what:—worse even than "clodhoppers." It is the improvement of the mind that makes the man. This we see by referring to savages and civilized nations. It is all the difference. According to our cultivation, so will we rank in the scale of social life. Why then delay? Why neglect what is as important as life itself—what makes the man? It is not for the want of schools. It is not for the want of evenings and leisure hours of the day for reading and improvement: we have these—but they are often employed in frivolous nonsense, or sheer idleness. Such men will never be men—drones only, and obstructions in society. It is not these men that uphold society. Who then? Not the illiterate. Let the reader answer the question himself. It is not even the "re-

spectable" man who sustains society, much less gives life and animation to it.

A world of treasure is wrapped up in books. The world's wisdom is there, its joy—yes, its joy is found in books—the joy that you see in a green field, in the rainbow, in a beautiful face, in a heroic action, in a deed of benevolence. Books have these things. They chronicle them; and all we need to do is to open them and possess this treasure. Is it a wonder then that so much stress is laid upon education; that books are so highly valued? What a stir are books and newspapers making in the world. Yes—they are stirring up the world of mankind, and making them just what they are. We all are after the news. This is a part of the grand thing; for the press but puts down, prints, what the world is. Here we find it—all the wonder. And shall we not possess ourselves of it. Quietly seated in our room, we may have the events of the world brought to us.

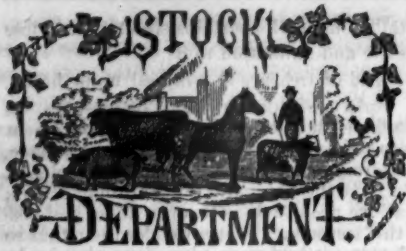
A love for books then we should cultivate. It is not necessary to have a "great education." One of the greatest of poets was a farmer's boy. He had no more education than farmer boys generally have. But he read and thought, so that his mind might develop as well as his body: I mean Robert Burns. He cultivated a love for nature; and we see how he succeeded. Not only the fields and brooks were pleasant to him—whatever he saw he courted companionship with—whatever was amiable in the world. The result is Highland Mary, the Cotter's Saturday Night, that gentle lyric

"Flow gently, sweet Afton,"

and so many more, that have become household words.

These tell the life of Burns; just how he enjoyed himself; what he felt. Now in reading these, or hearing them sung, we have the same feeling that Burns had. All these things are acquired by cultivation, that is, by getting—getting knowledge, enjoyment. Happiness is not living the life of a savage, of a brute. It is rather the approach to angels—striving to acquire a good temper, good morals, knowledge—in a word, learning to be happy. F. G.

CUT WORM AND CORN GRUB KILLER.—Dr. Asa Fitch, the eminent entomologist of the N. Y. State Agricultural Society, says: "I doubt not you have noticed in plowed fields a large black beetle with most brilliant golden dots placed in rows on its back. It is the *Calosoma calidum* of entomologists, and its eggs produce the corn grub killer. It is a most inveterate foe of the cut worm, grasping the worm in its strong jaws, and in spite of its violent writhing and struggling securely holding it, and when it finds these worms in plenty, it gorges and surfeits itself upon them, till it is so glutted and distended as to be scarcely able to stir—for it never knows how to let a cut worm alone when it meets with one. It is continually hunting these worms, feeding on nothing else if it can obtain them. Both it and the golden dotted beetle which produces it, therefore, should never be harmed."



[Written for the Valley Farmer.]

#### Dog Owners and Sheep Raisers.

I have just been reading "M.'s" article on a "Dog Law Wanted," with interest, but not in a hopeful spirit. I am one of the sufferers in the matter of killed sheep, having lost from one to twenty annually during the last half dozen years, and can with all the feeling of one who has seen the corpses—the mangled corpses of "fair, fat and nearly forty" ewes, cry for vengeance on the little dogs, and all whose tastes or vagrant habits lead them into the ignoble pursuit of sheep killing.

But I find that dog owners are more numerous than sheep raisers; the dog interest is weightier than the sheep interest—none so poor and shiftless as not to keep three dogs. They toil not neither do they spin, and Solomon in all his glory was not arrayed like one of the "yaller dogs" such as Holmes immortalized in "Elsie Verner," and the eloquent member from Pike alluded to in the Missouri Legislature when he said, "I'd rather be a long, mangy, strange yaller dog, with a bob tail, and bay at the moon, than not to say this is me own, me native State." The yaller dog needs no foddering nor shearing. He can live upon scraps pilfered of nights from the neighbors' houses or on the flocks of careful farmers. He bears neglect better than any other species of live stock. Hence the lazier man is the larger will be his per-centage of dog stock.

On the other hand, sheep are generally less kept than any other kind of farm stock, although experience has proved them to be among the most profitable. The reason probably is that whilst they do not need more care than many other animals, it is of a peculiar kind and requires separation from other animals—a departure from routine which many will not make.

The dog interest preponderating, of course we must expect dog men to be elected to our State legislatures, who like some Egyptian member of the last Illinois legislature will regard all anti-dog legislation as too preposterous to be seriously entertained by so dignified a body.

It remains then to agitate the public mind by discussion. It is in vain, Mr. Editor, to extenuate the matter. It is an irrepressible conflict between opposing and enduring forces, and it means that the great Valley of the Mississippi must and will sooner or later become either a dog owning or sheep raising section. Either the broad prairies of Illinois and the rock-ribbed hills of Missouri will be ultimately grazed by profitable flocks of sheep, and Chicago and St. Louis become marts of a rich and varied agriculture, or else Egypt and Northern Missouri must be surrendered by their farmers to yaller dogs, yaller breeches, and the export of sheep pelts.

I was well pleased last winter to hear the plan of a reverend sheep grower to forward the sheep cause. He showed the figures of his sheep husbandry to his neighbors, and proved its profits so incontrovertibly that he easily induced them one by one to make a small investment in sheep. In a few years nearly all in his region owned sheep. The canine interest dwindled rapidly, and the yaller dogs hid their diminished heads. This as a Christian scheme of salvation pleased me well. There remains for those yet in the bonds of iniquity, shot guns and strychnine.

But I will not prolong this communication except to add, for fear of being misunderstood, that I am opposed to all yaller dogs and dogmas, and shall remain so until that millennial time when Lion, Bose and the lamb can lie down together, and sheep and politicians are less dyed in the wool.

FARMER FREEMAN.

#### SHEARING SHEEP.

Few know how to shear sheep properly. The following hints from the *Ohio Farmer* will be useful:

*First*—In shearing time do not pen your sheep more than half a day at a time. To do so makes them weak, irritable, and difficult to shear.

*Second*—I think the best plan to shear is on a platform, sixteen or eighteen inches high. The sheep should sit on the table, and rest its back and head on the left leg, the left leg is on the table, the right one is on the floor. Commence cutting the wool at the brisket, shearing along the belly, letting the wool roll to the left, where it will be out of the way. When this is done, shear the flank, then commencing at the point of the shoulder and run the shears to the right ear; shear the neck to the left ear, and the left side as far as the back bone. Now change

sides with the sheep, standing the right foot on the table, and finish the neck. Now shear the right side, finishing on the right hind leg. In this way the fleece is kept whole, the sheep is turned but little, thus avoiding struggling, tearing of the fleece and injury to the animal.

Within the last eight years, I have sheared five thousand sheep, without having a fleece kicked to pieces, and seldom cut a sheep; there is no excuse for cutting a fat sheep. When badly cut, they will always kick, and then the shearer will pound them with his shears or fist. The kinder you treat a sheep, the better they behave. Many wool growers want their sheep sheared very close to the hide, but this is not well for the sheep nor for the next growth of wool. When sheared close, the hot sun injures them materially.

[Written for the Valley Farmer.]

#### VETERINARY DEPARTMENT.

By Geo. H. Dadd, V.S., St. Louis, Mo.

DISEASE OF THE SKIN—MANGE—LOUSINESS:—  
REMEDY FOR THE SAME.

A great many of the horses lately disposed of by the Government, as "condemned," "contraband," &c., were, and still are, the subjects of various forms of *skin disease*—mange, lousiness, &c., and it is probable that when such animals are introduced into decent "horse society," they will be the means of spreading the itch, mange, lousiness, &c.; hence, I propose to give the readers of this journal some advice on the subject.

In the first place, almost all the skin diseases prevalent among army horses owe their origin to neglect and filth. Hence cleanliness—brush and curry-comb—are the best means of prevention, and are also valuable as curative agents.

The best local application for diseases of the above character is as follows:

Take equal parts of Linseed Oil, Tincture of Lobelia, Pyroligneous Acid, Spirits of Turpentine; Mix.

Apply, by means of a sponge, a portion of the above mixture to all parts of the body; and the patient should have an occasional dose of sulphur in a "bran mash;" four drachms of sulphur constitute a dose.

The next best advice I have to offer is, Government horses laboring under any of the notorious prevalent affections, are very dear at any price; hence, *touch not, purchase not*; for good money and bad horses soon part company; and as the old saying is, "that is the way the money goes."

A great many of the horses lately disposed of by the Government are the subjects

of a skin disease known to medical men as *mange*; it makes its appearance as a pustular eruption, commencing about the regions of the roots of the hair of the *mane* and *tail*; where, soon, a scurfy state of the skin appears. The disease soon extends, and makes itself visible by spots denuded of hair; these spots are the seat of a coating of mealy powder which can be rubbed off. Throughout the whole course of the disease the animal is tormented with an incessant itching sensation, and is continually rubbing and biting himself. It should be generally understood that this malady is highly contagious, and, therefore, can readily be communicated from one horse to another; hence the affected animals should not be allowed to come in contact with others not so affected.

Mange, or itch, sometimes assumes a highly inflammatory type; this depends somewhat on the vascularity of the surface of the body, and the specific irritability of the skin which is peculiar to some animals of the sanguine and nervous temperaments.

In some stages of this skin affection, a close examination will detect, under the scarf-skin, little watery eminences, known as *vesicles*; and at the base of the same can be seen little red patches; this is the seat of the parasite, and his burrowing course can be distinctly traced from one vesicle to another.

The parasites, which are said to be the sum and substance of the disease, are termed "Acari," and their "manibles"—or mouth—are a sort of pincers, pointed and sharp, which enables them to puncture the common integument, or skin of animals, and at the same time to imbibe the animal juices, on which they thrive and propagate.

The remedy, or local application, previously recommended, often fails in curing "Itch or Mange," simply because it is not rubbed on the surface with sufficient force to penetrate the scarf-skin; hence, it has but little, if any effect, on the concealed parasite. In order to obviate this difficulty, all excrementitious matter must be removed from the skin by means of a good, stiff brush, which brush must never be used on any other animal.

¶ The modern method of applying the local application is to rub it into the skin, by means of a thick pair of leather gloves, and some "Elbow Grease." The rubbing should be repeated daily until the disease is conquered. Supposing the disease to be "stubborn" and protracted, the external application must be rubbed into the skin by means of a stiff brush, and the animal should be daily dosed with the following:



Sublimated Sulphur, one drachm; Iodide of Potass, twenty grains; powdered Poplar Bark, one drachm; to be incorporated with the food.

#### PITYRIASIS IN ARMY HORSES.

I was present at a sale of army and contraband horses lately held in this city, and I noticed that many of them were the subjects of a skin disease known to the members of our profession as "*Pityriasis*," which disease chiefly affected the face, neck, sides of the chest, and flank.

The disease presented circumscribed patches, more or less denuded of hair; the epidermis or external covering of the skin, detached itself from the sub-tissue in white flakes, yet there appeared to be no itching sensation nor impairment of the general health, consequently I am led to infer that the disease is not contagious. By friction with linseed oil and lime water, equal parts, a cure is easily effected.

#### SHOEING HORSES.

It is a generally well understood fact by horsemen that more horses' feet are injured by bad shoeing than in any other way. While we have had line upon line and precept upon precept on the subject, the evil continues almost without abatement. We venture nothing when we say that more than one half of the horses of eight years old or upwards, clearly show the effects of bad shoeing in one way or another. And yet it seems to us a very easy matter to obviate the main difficulty, by following a few simple rules only. Much that has been written and published upon the subject of horse shoeing has been of so scientific a character, going so much into minute detail, and often in so ambiguous language, that but very few horse shoers are sufficiently learned to understand and follow it; and we very much doubt if the writers themselves have a very clear idea of the principles they would inculcate.

Scientific knowledge is of great benefit to its possessor, when generously interspersed with good, practical common sense, without which it is of but little value to any body. Shoeing a horse is a purely mechanical operation, and if good mechanical principles were followed there would be fewer complaints of bad shoeing. A few simple and clearly defined rules, such as may be easily understood and followed by any one, will be sufficient to obviate in the main, if not entirely, the difficulty which is the subject of almost universal complaint.

Young horses, if shod at all before four or five years old, should have their shoes taken off and reset as often as once in three or four weeks. The hoof should be kept pared at the heel so that the frog may come to the ground. This keeps the frog moist and healthy, and has a tendency to spread the heel and keep the foot in its natural shape. The soft and healthy frog

acts as a cushion, and saves the foot from damage while the animal travels upon hard roads. It also keeps the foot in a healthy state, and is therefore of great importance to the value of the horse. If the heel is suffered to grow down, the frog becomes dry and bony, and when it comes in contact with a stone or other hard substance, the horse cripples, and subsequently becomes lame. When the hoof grows down long at the heel, it becomes dry and contracted, and the horse stands upon his toes in an unnatural and straining position. The frog, however rugged, should not be touched by the shoer's knife. To avoid raising the heel so that the foot must come to the ground in an unnatural position, the shoe should be of the same thickness at the toe as at the heel.

When the foot is properly pared, the shoe should be made to fit it so perfectly that the outside crust of the hoof will not have to be cut down to fit the shoe. The shoe should not be opened at the heel wider than the hoof, as this has a tendency to crowd in and contract the foot at this point; but if the outside of the shoe is brought in even with the outside of the hoof, it has the opposite effect. The hoof should never be rasped above the clinches, or the natural enamel, which is given to it for some wise purpose, disturbed. Fancy shoers—from all of whom good Lord deliver us—are too much in the practice of rasping, filing and sand-papering the hoof to make it look nice, without ever thinking that they are doing it an injury that is beyond their power to repair.

**FEEDING BOXES BETTER THAN RACKS.**—Horses do not generally gather their food from trees; why then should they be compelled in winter to take it from a rack overhead? Every mouthful requires the animal to assume an unnatural position, which, with young horses particularly, must interfere with the proper development of the muscles of the neck, and with the graceful carriage of the head. May not the awkward manner in which many horses thrust their noses forward and upward be attributed to the force of habit acquired in feeding from a high rack? Another serious objection to racks is the danger from the seeds, dust, &c., falling into the eyes of the animal; and further, all the effluvia of the stable, the vapors from liquid and solid excrements, the exhalations from the skin and from the lungs pass upward, and are to some extent absorbed by the hay—an addition neither savory nor healthful. The feed box may be made equally convenient with the rack, and is open to none of the above objections. It need not be large, and if the bottom is made of slate, all rejected fodder can be easily removed. A closed box on one side for feeding grain will be needed if the main box be left open. The above may seem an unimportant matter to many, but everything is worthy of attention which can add to the comfort and health of this noblest domestic animal.

**LICE ON CATTLE.**—Silas Mason gives the following simple remedy for these vermin, in the *New England Farmer*:—"Take poke root, sometimes called blue dragon or hellebore, and boil

enough to get a very strong tea or wash, and apply it as a wash thoroughly, and it will surely kill every one of the vermin, and without the least detriment to cattle. One good application is sufficient.

### DISEASES OF HORSES.

Edward Mayhew, an eminent veterinarian, and the author of the *Illustrated Horse Doctor*, recently published in London, briefly sums up the principal diseases to which horses are subject:

**CRIB BITING.**—*Cause*—Sameness of food, and unhealthy stables, or indigestion.

*Symptoms*—Placing their upper incisors against some support, and with some effort emitting a small portion of gas.

*Treatment*—Place a lump of rock salt in the manger; if that is not successful, add a lump of chalk. Then damp the food, and sprinkle magnesia upon it, and mingle a handful of ground oak bark with each feed of corn. Purify the ventilation of the stables before these remedies are applied.

**FANCY.**—*Cause*—Excessive labor, poor feed, and bad lodging, operating upon old age.

*Symptoms*—It is, at first, inflammation of the superficial absorbents. Lumps appear on various parts. If these lumps are opened, healthy matter is released; but the place soon becomes a foul ulcer, from which bunches of fungoid granulations sprout. From the lumps may be traced little cords leading to other swelling. The appetite fails, or else it is voracious. Matter may be squeezed through the skin. Thirst is torturing. At length glanders break forth, and the animal dies.

There is a smaller kind of fancy called button fancy—the smaller sort is the more virulent of the two.

There is no known cure for the disease.

**HIDE BOUND.**—*Cause*—Neglect, or turning into a straw or stable yard for the winter.

*Treatment*—Liberal food, clean lodgings, soft bed, healthy exercise and good grooming. Administer daily two drinks composed of—liquor arsenicalis, half an ounce; tincture of muriate of iron, one ounce; water, one pint. Mix, and give as one dose.

**ROARING.**—*Cause*—The bearing rein; the folly of fashion.

*Symptoms*—A noise made at each inspiration.

*Treatment*—No remedy. The cabman's pad is the only alleviation; that conceals, but does not cure the disease.

**RING BONE.**—*Cause*—Dragging heavy loads up steep hills.

*Symptoms*—A roughness of hair on the pastern and a bulging forth of the hoof; a want of power to flex the pastern; an inability to bring the sole to the ground, only upon an even surface; loss of power and injury to utility.

*Treatment*—In the first stages apply poultices, with one drachm of camphor and opium. Afterwards rub with iodine of lead, one ounce; simple ointment, eight ounces. Continue treatment for a fortnight, and after all active symptoms have subsided, allow liberal food and rest; work gently when labor is resumed.

### SHEEP ON WHEAT FARMS.

Gen. Rawson Harmon, an extensive wheat grower and sheep breeder of Wheatland, N. Y., says:

"For many years we have kept two sheep to the acre of wheat land; say for 150 acres, 300 sheep may be kept, and the regular rotation of the wheat and clover kept up on the 150 acres, 40 of which should be in wheat each year, and 10 in corn and roots. Clover seed should be sown in March or April, six quarts to the acre, and as soon as the ground is dry in the spring, one bushel of plaster should be sown to the acre. Barley or oats should follow corn and roots and seeded as above. So we have 50 acres seeded with clover each year, 10 in corn and roots—leaving 90 acres for pasturage and mowing. A team is to be kept for the work on the farm, and three or four cows for the use of the family; and no other stock should be kept, except hogs, for the family use, and they should be limited, for mutton is cheaper and more wholesome meat than pork. The above, for the use of the family, is all the stock that should be kept on a wheat growing farm, except sheep; and with the above amount of land, 300 sheep may be kept and well cared for. They should be kept at the barn till the first of May, when they should be turned on the fields which the corn and root crops are to occupy, and where the wheat is to be sown, remaining till the clover in the pastures is half grown, then giving the sheep a chance at that, which will keep them till the clover commences heading out where the wheat and barley have been harvested. One great cause of failure in sheep husbandry is in letting the sheep run on the pastures long after clover has done growing, and in the spring before it commences growing, when there is no tallow in the clover, and it is gnawed into the ground, and much of it destroyed."—[*Genesee Farmer*.

### GLANDERS.

Although this disease has been pronounced incurable by Mr. Bauley, of Alfort, some cases are reported in the *Gazette des Flopitaux* in which the attempts at a cure proved successful. In April, 1859, writes Dr. Joufflet, of Montrouge, I bought a thorough-bred mare, seven years old, and apparently sound. One month later: pustules in the legs ulcerating, sub-cutaneous abscess, glands, oedema of the limbs. Mr. Reynal, of Alfort, diagnosed chronic glanders requiring slaughtering. No running at the nose; nothing there, nor in the pharynx or the mouth. I could not consent to such a sacrifice, but instituted this treatment: 75 grains of sulphur, twice a day, common salt, iodine, good diet. The sub-cutaneous abscess opened of itself; a degenerated ganglion formed an enormous vegetation. I removed it, and to combat suppuration, I administered the fresh leaves of aconite. The animal was losing flesh. I continued this treatment for four months, aided by good diet; barley, wheat, oats: and to-day, my mare looks so well that I am beset by amateurs, who want to buy her.

One of my friends had a horse in the same

condition, and was going to have it slaughtered, as it did not eat. It was placed under the same treatment; injections, tincture of iodine, sulphur at meals. After a few days, the appetite returned, and with it the strength, etc.

Two farmers, father and son, contracted the glanders from five horses affected with it. The father fell rapidly as a victim of the disease. The son, whose disease assumed the chronic form, was placed by Dr. Lesur under a mercurial treatment; calomel internally, and cauterization of the pustules with the acid nitrate of mercury. One month after, the cure was complete.—*[American Medical Times.]*

### BREEDS OF CATTLE.

Horned cattle are kept chiefly for their milk, their labor, and for the production of beef. They also consume and thus make useful many products of the farm which would otherwise be lost, and furnish manure for the enrichment of the soil.

They are divided into certain races, breeds or families, distinguished by different qualities or characteristics which have been produced or developed by varieties of climate and soil, and by the manner in which they have been required to live by man.

There are five distinct races or breeds in this country, known as Ayrshires, Jerseys, Short-horns, Devons and Herefords. Individuals of other breeds have been imported from time to time, but their number has been so small that they have had little effect on the stock of the country.

No one of these breeds unites, in a very high degree, all desirable qualities. Some are best fitted for giving milk, others for beef or labor. Cattle should therefore be selected with regard to the specific object for which they are wanted, and that object should be had in view in their keeping.

The Ayrshires take their name from the county of Ayr, in Scotland, where they originated seventy or eighty years ago. They are kept chiefly for dairy purposes, for which they are admirably adapted, on account of the large quantity of milk they give in proportion to their size and the amount of food consumed. Their milk is of good quality, though not, usually, so rich in butter qualities as that of the Jerseys or the Devons. They are well adapted both for beef and for labor, though in these qualities they are probably surpassed by the Devons or the Herefords.

The Jerseys are celebrated for the richness of their milk, and the excellence of butter made from it. They come from the islands of Jersey

and Guernsey, in the British Channel, where they have been highly valued for dairy qualities for many years. They are ill-adapted for labor, and their beef producing qualities do not compare very favorably with those of some other breeds, although they are easily fattened, and their flesh is of good quality.

The improved Short-horns are large in size, and, in a rich and fertile section of country, are well-adapted for the production of beef. They come to maturity at an earlier age than any other family of neat cattle, and attain a greater weight.

They first became known in the luxuriant valley of the river Tees, England, and first really celebrated in the neighborhood of Durham. Hence they were for many years called Durhams or Teeswaters. They have been extensively introduced into this country, and have had a great influence upon our stock.

The North Devons are remarkable for great uniformity of color and size, and are kept chiefly for beef and as working cattle. They come from Devonshire, in the southern part of England. They are small, hardy and easily adapt themselves to short pastures. Their milk is rich in quality, but deficient in quantity.

The Herefords, so called from the county of Hereford in England, where they originated, have nearly the same qualities as the North Devons, but their size is considerably larger. They are kept mainly for their beef, which is of peculiar excellence.—*[Ag'l Review.]*

**DR. DADD'S REMEDY FOR WARTS:**—A wart having a broad base should be treated in the following manner: Take a common suture needle, and arm it with a double ligature; each ligature is to be composed of three threads of saddler's twine, well waxed; pass the needle right through the centre of the wart, close down to the skin; tie each half separately with a *surgeon's knot*, as tight as possible; cut the ends off pretty close to the knot, and in the course of a short time the whole will drop off. A wart having a small circumscribed pedicle may be removed in the same way, by tying a *single* ligature around its base. If the exposed surfaces should not heal readily, moisten them occasionally with tincture of aloes and myrrh; and if they show a disposition to ulcerate, sprinkle them with powdered charcoal and bloodroot, equal parts. Warts about the sheath or penis should be removed by excision; to do this we often have to cast the animal, the consequent hemorrhage to be arrested with tincture of muriate of iron or styptic.

**HEAVES**—The *Farmer and Gardener* gives the following as a cure for the heaves in horses: Take smart-weed, steep it in boiling water till the strength is all out; give one quart every day, mixed with bran or shorts, for eight or ten days. Give green or cut up feed, wet with water during the operation, and it will cure.





## HORTICULTURAL.

### How to Destroy the Peach Tree Worm.

ED. VALLEY FARMER: In the April number of the *Valley Farmer* a correspondent gives a "Remedy for the Peach Borer." As the writer does not seem to fully understand the character and habits of the Peach Tree Worm, I propose to offer some remarks upon the subject, and give you my method of destroying the worm.

The writer alluded to, confounds the borer that attacked his Elm, Maple, Poplar and Sycamore trees, with the Peach Tree Worm, which is quite a different insect. The Peach Tree Worm is hatched, and makes its entire growth, and goes through its various changes, to the perfect insect, within the period of a single year; and hence "*the worms, large and small, and their eggs,*" are not to be found in the trees at the same time, as he intimates. The moth deposits her eggs around the trees, near the surface of the ground, in the month of June. In a few days the eggs hatch, and for two or three months thereafter the young worms may be found just below the surface of the ground, upon the live bark; and if examined at this period they may be readily destroyed by removing the earth two or three inches below the surface, and rubbing the bark where the worms are found with a corn cob, or any other elastic substance. After the worms get larger, they eat their way under the bark, and complete their growth between the bark and the sap wood, never entering the body or wood of the tree.

The least expensive and most sure method of destroying these worms is to attack them in the manner indicated before they become so large as to hide themselves under the bark, when they may be readily seen, though they do not exceed a quarter of an inch in length. One or two examinations between the months of August and November will generally keep the trees quite free from injury. If any are overlooked, the appearance of a considerable discharge of gum in the early part of the following spring

will indicate their presence under the bark. They are then best removed with a sharp pointed knife. A slight tap upon the bark with the knife will reveal their locality, by the sound. They cause more injury to the trees during the last month of their existence (in May) than in the ten months previous, because being near maturity they eat more. If left to mature and deposit their eggs the coming season, they are apt to almost entirely girdle the trees, and cause premature death.

The most sure preventive, if any one will take the trouble, is to remove the earth at the base of the trees down to the roots, and then surround the tree with a bundle of straw, to the thickness of two inches, binding it with twine about the body, and returning the earth upon the butts of the straw. This should be done in the spring before the moth appears. But the least expensive method is to destroy them while young, and before they work their way under the bark. The application of hot water is effectual, and will cause no injury to the tree, but it is not practicable in orchard culture. It would be an almost endless task to treat a thousand trees in this way. But with a trowel during the summer or fall, a thousand trees may be examined and the worms killed with a cob in a short time.

The peach tree worm attacks perfectly healthy trees, as a long experience in the nursery business has proved, as they are often very destructive to the most vigorous and healthy young trees. The worm that attacks apple and other trees that have become diseased from sun-scald, is quite a different insect, and is a true borer.

I have never seen the body of the peach tree injured by the sun. The peach is a native of a warm climate, and the great destruction among them in late years is caused by the sudden changes of weather from warm to severe cold. These changes are more fatal than formerly, because the country is less protected by the primitive forests. B.

Near Lexington, Ky., April 8th, 1862.

**THE APPLE TREE BORER.**—We are informed that Chas. Wheeler, of Stratford, Ct., has been successful in destroying or repelling the borer by the following treatment: He thoroughly saturates cotton pellets of the size of a pea with spirits of turpentine, three or four of which are pushed into each hole made by the insect. The hole is then stopped with putty, and the vapor from the turpentine, it is supposed, kills the borer. We are informed that Mr. W. has by this method saved trees that have been perforated in fifteen to twenty places within two inches of the ground, and which were supposed to be past recovery.

[Written for the Valley Farmer]

### The Cucumber Magnolia (*Magnolia Acuminata*.)

One of the most beautiful trees in America, is the Cucumber Magnolia, which grows abundantly in Knox Co., Ohio, in the neighborhood of Mount Vernon. It is generally found on the higher lands along the ridges. It is tall, of cone shape from the lower limbs to the top. The trunk is straight; bark of dark ash color. This tree bears a beautiful aromatic fruit of deep scarlet red, oblong, from 4 to 6 inches long, 1 inch in diameter, which ripens about the first of Sept., opens its cells, and drops its seed (which are about half the size of persimmon seed) late in Oct. The fruit is considered an excellent medicine, being a tonic, antiseptic and stimulant, and is used successfully in curing intermittents.

Perhaps this is one of the most beautiful trees on the continent. The fragrance of the fruit is delightful, equal to the clove and other aromatic varieties of the Islands. The leaves are as large as your two hands, of heart shape. As an ornamental, this tree cannot be excelled.

J. LLOYD.

### The Best Stock for the Dwarf Pear.

Mr. P. Barry, the eminent Pomologist and Nurseryman, in reply to a letter from Mr. Carew Sanders, thus speaks of the relative merits of the Angers and Fontenay Quinces for dwarfing the Pear. The letter is a private one, but we presume Mr. Barry will have no objection to its publication:

Dear Sir:—Your favor of the 10th inst. is received.

In relation to the comparative merits of the Angers and Fontenay Quinces as stocks for the Pear, I would say that our experience now is, after very extensive and careful trial, that there is very little difference. The Angers is the strongest and most rapid grower and grows latest in the season, but the Fontenay is more hardy.

The pear unites well on both—our oldest and best specimen trees are on the Fontenay. At Orleans, in France, they will not use any but the Fontenay, and at Angers none but the Angers.

We think that the Seckel, and a few other sorts do better on the Angers than on the other, but this may arise from some particular circumstance.

The Upright Quince referred to in the *Fruit Garden* has not proved valuable for a pear stock, but we have found it useful for other purposes. It roots like a willow.

As to blight we have never observed that one was more liable to blight than another; and, at all events, we do not think that the pear on one would be more subject to blight than another.

The fruit of both Angers and Fontenay is good, but we do not think that either of them are equal to the true old Orange Quince. The Reas Mammoth is the best quince for culture for the fruit.

Resp'y, yours, P. BARRY.

Rochester, N. Y., January 18th, 1862.

[Reported for the Valley Farmer.]

### Meramec Horticultural Society.

EUREKA, 3d April, 1862.

The fortieth monthly meeting was held pursuant to order of adjournment. President Morse in the chair. The minutes of the former meeting were read and approved.

The President announced that the radish seed had been purchased according to the instructions of the last meeting, and was ready for distribution.

Two new members were elected.

A communication from A. S. Redfield was read, and on motion laid on the table.

Three parcels of apple scions were received from Mr. B. Arnoldt, and distributed, consisting of the Fulton, Missouri Pippin, and Huntman's Favorite.

Three subjects for discussion at the next meeting were presented, and "The Proper Management of Young Orchards," adopted.

The Fruit Committee reported the following fruits on the table: From Wm. Harris—Wine Sap, Ortley and Pryor's Red; the two latter in very fine condition for the third of April. From Mr. T. R. Allen, Willow Twig and Priestly, as hard as bullets; Newtown Pippin, very fine, and large sized Jonetons in fine condition. By P. M. Brown, Jonetons of very fine size and extra good quality from the orchard of Mrs. Francis Brown, Franklin Co. Mr. Jas. Shields brings from Mr. Davis (State Road), Kaighn's Spitzenberg, Gilpin, and an apple much like the Lady Apple, all fine keepers, but of poor quality.

A. W. McPHERSON, Ch.

It was on motion, RESOLVED, That the Standing Committees on Fruits, Flowers, and Vegetables, be and are hereby instructed to keep accurate notes of the articles exhibited, and by whom exhibited, so as to be able at the end of each year to award such premiums as the Society may determine, to the most regular and best contributors.

The subject of the day being in order: "Ornamental Trees and Shrubs," the Secretary, upon call, briefly noticed the importance of giving prominence to the beautiful ornamental trees of our forest, and suggested that at this particular time, when economy was so needful, they were in every sense of first importance; and named as worthy of attention the Bumelia or Southern Buckthorn Crab Tree, Service Berry, Wahoo, Prickly Ash, Sorbus Americana (no common name known), Hop Tree, Mulberry, Kentucky Coffee, Red Bud, Papaw, Persimmon, Birch, Buckeye, Meadow Sweet (*Spiraea Prunifolia*), Yellow Flowering Currant, Indian Currant, Wax Work, Bitter Sweet, Trumpet Creeper, Virginia Creeper and a splendid scarlet flowering Dogwood growing at the lower part of Bonhomme Bottom; the Cedar for an evergreen; and directed attention to the fact that all of these and many more were growing in the richest profusion all through Meramec Township, which could perhaps vie in its collection of native ornamental and useful trees, shrubs and plants, with any township in the State or perhaps in any other State.

Considerable discussion was had upon the transplanting of plants from the woods, which was particu-

ated in by Dr. McPherson, Mr. W. Harris and the President.

Mr. E. Vaughn made a most beautiful and appropriate speech upon the importance of beautifying home, and drew some true, strong and pathetic pictures of the moral and social influences of unlovely homes which circumstances we are sorry to say render it impossible to give at present, but will be held in store for the future).

The President announced the next meeting to be held at the house of Dr. A. W. McPherson at Allenton, being on MAY DAY, at 10 o'clock, A. M.

On motion, the meeting adjourned.

WILLIAM MUIR, Sec'y.

[Written for the Valley Farmer.]

### Evergreen Ornamental Hedges.

A neatly kept hedge is one of the greatest ornaments of a country residence. There is no one who cannot appreciate and will not acknowledge the great beauty of well-kept hedges.

Of the deciduous and useful hedge-plants that are used for outside fences, in place of posts and rails, and intended to turn stock, and make a strong and efficient barrier, such as the Osage Orange, Honey Locust, Buckthorn and others, we shall not now speak, but confine our remarks to the recommendation of hedges for ornamental use, where the double object of a screen, division fence, and line of beautiful evergreen foliage, may be had at the same time.

There are numerous deciduous flowering shrubs that make very handsome hedges, but being destitute of foliage in the winter are not as desirable generally as the Evergreen: of these, however, we may speak in a future article.

Evergreens should always be planted in the spring, and, in my opinion, should be left until immediately preceding the commencement of growth, when with ordinary care in removal and transplanting, and a proper selection of plants, and the observation of a few simple rules, success will be almost certain. These rules are—to select plants that have not stood longer than two years in the nursery without removal; to take them up with as little loss of roots as possible, especially preserving the fibres, of which the roots of young evergreens are mainly composed. It matters little whether much soil adheres to the roots or not, but by all means avoid exposure of the fibres to the wind and sun, even for an hour; keep them moist, and they will be safe.

The first part of the present month is perhaps the best time to transplant evergreens, hence the object of this article. The places and objects for which evergreen hedges are adapted, are—for thick screens, to break off the winds in exposed situations, to hide disagreeable and unsightly objects, to inclose portions of ground, form borders, &c. devoted to half-hardy plants;

for all sorts of inside division lines, such as to separate the kitchen garden from the lawn, or other ornamental grounds; for front yards, cemetery lots, and numerous other situations, where dividing lines are wanted, and where the useful and ornamental may be combined.

In preparing the ground for a hedge, a space not less than four feet wide should be deeply and well spaded; use no crude manure. If the soil is in moderate heart it will require nothing. If anything is used, let it be leaf-mold, rotted sod from pasture, a little sand or mortar rubbish; and if poor, some well decomposed manure may be added, all to be thoroughly incorporated with the soil. But generally little or none of this will be required, a good depth of well-prepared, ordinary soil, being sufficient for the growth of most kinds of hardy evergreens.

The hedge is to be planted along the middle of this strip, and the whole must be kept worked, mellow, and free from weeds for several years. But it may be used as a border for low-growing flowers, and may be made wider to good advantage for that purpose, when it will make a very attractive border.

The kinds of evergreens best adapted for hedges are several, first of which perhaps is the American Arbor-Vitæ, for several reasons. It is easily and cheaply obtained, perfectly hardy, and adapted to a great variety of soils and climates; its form and normal growth is pyramidal, just the proper form we desire in a hedge; it requires but little pruning to bring into proper shape, and with the necessary pruning judiciously done, it makes a dense wall of verdure. The Chinese Arbor-Vitæ is of a brighter, livelier green than the preceding, and makes a very beautiful small hedge: nothing can surpass it in beauty when young. It is however rather tender, does not spread at the base like the American, growing up more slim, and, as it attains age and size, dies out at bottom, becomes ragged and unsightly.

For hedges of larger growth than the above, nothing can surpass the Hemlock Spruce for elegance and beauty, in its dark, dense growth of foliage, and its patient endurance of the shears; it undoubtedly makes the finest evergreen hedge of all; but it is of slow growth, and somewhat expensive to obtain. The Norway Spruce makes a most admirable screen, if its branches sweep the ground and are made dense by clipping; no wall can be a more effective screen from the cold blasts than this. It grows very rapidly, also; is intensely hardy; adapts itself to almost all soils and climates; will run



up and make a tall hedge or wall of the deepest verdure, and be stiff and strong at the base to resist almost anything. In large places where plenty of room can be given, nothing can surpass this for the above objects.

The two last named, when planted for hedges, may be set three to four feet apart, but the smaller Arbor-Vitæ should be set from one to two feet. The Red Cedar also is a strong growing evergreen, which makes good screens or hedges of the larger class, and may be treated similarly to the Spruces.

The best size to set out hedge plants is about one foot high. They are cheaper at that size than any other, may be removed with more safety, can be more easily trained to the desired shape, and when well established will grow very rapidly into a full-sized hedge; though where immediate effect is wanted, and expense is not spared, evergreens may be transplanted into hedges from one to six feet high, *provided*, they have been frequently removed in the nursery, previously, and are well furnished with branches down to the base.

The trimming of an evergreen hedge is simple and easy. None is required the first year. Afterwards, the top of the plants should all be cut off at an even height, and the sides formed by trimming from base to apex, so as to attain a triangular form, which cannot be obtained in one year; but the hedge must be sheared so as to grow to it, after which it is easily kept in this condition by an annual shearing at mid-summer, when the outside will soon become thick, dense and smooth. CAREW SANDERS.

### TIME TO PRUNE.

E. in *Field Notes*, says:

Custom often overrules judgment, and we have so long been accustomed to take from the practice of our fathers the rule to prune trees in February or early in March, that it is difficult to change, even when a knowledge of the error of our course is perfectly apparent. There is no better time to prune than that month in which the tree is making the most wood. The sooner a wound heals the better, and a tree which is growing, all know, will heal a wound quicker than one in a comparatively dormant state. The sap, as it rises from the root is in a crude state, but after it has been elaborated by the leaf it commences its downward current, and forms new wood, or the granulations that assist to heal a wound. It is evident, then, that when the tree has the most of leaves, and in a condition to elaborate the greatest quantity of proper

sap, that then is the best time for pruning. This period varies in seasons, from the middle of July to the middle of August.

### Cultivation of Watermelons—Hanover Variety.

ED. VALLEY FARMER: On the 14th instant I forwarded a note to you, accompanied by a package of watermelon seed, and promising as soon as my health would permit to furnish a history of that particular variety as far as my knowledge of the subject would enable me, accompanied by a system of cultivation that I conceive to be of great importance in that particular branch of amateur cultivation. I now proceed to redeem that pledge in the best manner I can:

Captain C. F. Woodson, of Mount Airy, of this neighborhood, who emigrated from Virginia some twenty-five years since, brought the seeds of that variety of watermelon with him, and inhibited the planting of any other variety on his premises; and as soon as I ascertained its super-excellent qualities I obtained seeds from him, and adopted the Captain's course of inhibition on my premises. Under this course of treatment the variety, I think, has become as distinctive in the vegetable kingdom as the Arabian horse, the Durham cattle, or the Cotswold sheep are in the animal kingdom. When I inquired of Capt. Woodson the name of this particular melon, he answered that he was not certain it had any distinctive name, but it was called by some the Hanover watermelon, from the name of the county where it was supposed to originate. But Dr. B. F. Wilson who came directly from the headquarters of this now famous melon, informs me that it is the Jackson Watermelon, so named from the man who originated or first introduced it to popular notice. This testimony, I think, settles the question of cognition.

My mode of cultivation is to select the very best piece of soil I can command, not too remote from my residence; let it be dry, warm, and rolling enough to carry off the surplus water after heavy rains; plant the patch in hexagons at fifteen feet distant from each other in hills, just so much elevated as to throw off water freely, the hills being deeply and well pulverized, and of large diameter. When the ground becomes sufficiently dry and warm to germinate seeds certainly and speedily, plant a sufficient number in each hill to insure a stand of three plants to each hill, a little scattered on the hill. These plants, besides the main leading shoot, throw out two lateral branches at the eyes immediately above the seed leaves. All other lateral shoots, both on the main and on the two lateral shoots near the root are to be kept pruned scrupulously clean during the whole season: it will be best, however, to let here and there a lateral grow on each side of these main runners to the length of two or three feet before they are clipped, and then cut behind the first joint, leaving the stems to brace the vines and keep them from rolling over in windy weather.

This may seem to some to be a large amount

of labor for a small return; but no sensible man will entertain such an opinion after giving this system a fair trial. My word for it, a given area of land or a given number of hills will produce more melons in number and of far superior size and super-excellence in quality to any mode I have seen practiced.

I enjoin it on you to not distribute any of the seeds I sent to any man who will not agree to adopt my mode of cultivation. JOHN SMITH.

New Melle, Mo., April 16th, 1862.

### The Mo. State Horticultural Society.

[Proceedings continued from April No.]

#### RAMBO—CONTINUED.

N. J. Colman—It is not a good fruit for market—in its season there are then too many apples for market; and is consequently not so good as a very early or late good keeping apple.

E. B. Coleman had to pay 25 to 50 per cent. more for Rambos than for good winter apples.

Dr. Edwards—I have paid high for it from Saint Charles.

T. R. Allen—I have known it for 20 years here as a good market fruit.

#### PENNSYLVANIA RED STREAK.

W. C. Flagg—Have known it all my life; it is first rate; the tree seems to be rather tender; it was injured in '55 and '56; has a fine color; good for eating, selling or drying. I recommend it for market and family; it is said to be Hay's Winter.

J. A. Bayles thinks that nothing resembles it more than the Smokehouse.

Wm. Hadley—I have grown it for some years and think it large; is fine for cooking, is good for drying, and is an excellent fall apple.

N. J. Colman—I will relate an incident in regard to the identity of this fruit. I wanted some scions of this fruit and ordered some from Mr. James Smith, Des Moines, Iowa, who is one of the best pomologists, but one who keeps his light under a bushel. I wanted 1,000 Winter Wine and 3,000 Pennsylvania Red Streak, and he informed me that they were one and the same.

Dr. Claggett—I know the Smokehouse, if this is a synonym; it is a highly valuable apple.

#### GRAVESTON.

N. J. Colman—I have raised them, and it is a most magnificent, showy and excellent fall apple, ripening in September.

Dr. Morse—Think it a little superior to the Rambo; have not seen it here.

N. J. Colman—Would not recommend it upon the evidence we have.

#### FALL WINE.

John A. Pettingill—A fine, hardy tree, superior to the Rambo as a table fruit.

W. C. Flagg—Fine for family; a shy bearer.

E. B. Coleman—I know it well; was killed entirely in '55 and '56 in Northern Illinois; it is a first class fall apple; does well in many places, although tender there.

#### FALL QUEEN.

W. C. Flagg—It is esteemed highly with us, and is recommended by the Illinois Society.

T. R. Allen—I have seen it grow at Hermann; it is very fine; would like to get some trees; it is large, and striped with red; a thrifty tree and a moderate or good bearer.

N. J. Colman thinks it is synonymous with the Buckingham.

M. G. Kern—There is a row of Fall Queens growing near my place; I have seen them for three years; it is the poorest bearer in the orchard. The blossoms fall as if frosted a little. I think it the same as the Buckingham. I have them side by side in the nursery and think them identical.

E. B. Coleman—In Southern Illinois the people will have 9 out of 10 trees the Buckingham.

Dr. J. B. H. Beale—It has a very fine spreading top.

#### JERSEY SWEETING.

#### RED SWEET PIPPIN.

Jas. A. Bayles—The More Sweet of Downing; a hardy tree; good grower, but not rapid; not injured by the winter; it has all fair fruit, and is the best late fall and early winter apple I know.

#### YELLOW BELLFLOWER.

N. J. Colman—A fine family apple, but not productive. It is said, never graft the Yellow Bellflower but bud it, and it will always be productive. Where it is so done it bears large crops.

E. B. Coleman—Sometime ago I was in the orchard of a gentleman in Illinois; he had some upon sections of the root, and some budded; he had 5 trees; he put them out about 16 years ago, and they bore about one bushel; it was on the first tableland on the river.

President—I have known it do well on clay land in Illinois.

E. B. Coleman—I know several other varieties that if worked upon sections of the root strike roots of their own readily and don't bear well, which if budded upon the seedling stock bore well. They don't make so large a tree.

Jas. A. Bayles—I know several trees that are very productive that were budded and not grafted; upon clay land they don't take root so readily.

Secretary has found them burst the barks near the ground.

#### ORTLEY.

T. R. Allen—I think there are hardly any orchards in this county without it.

N. J. Colman exhibits a specimen; it is one of the best fruits; it is a much better bearer than the Yellow Bellflower; of fine quality, and worthy of being placed upon the list.

#### ESOPUS SPITZENBERG.

W. C. Flagg—Has a good reputation for fine specimens; but not as a good bearer or grower.

Dr. Morse—It is grown in our neighborhood—it is there apt to be discolored by fungus.

Secretary has seen some fine, well colored specimens grown on the uplands.

Jas. A. Bayles—I have seen it; it does not keep late in the winter; is apt to rot at the core.

President—My own experience with it here is not favorable; being familiar with it in New York I was much disappointed with it here.

N. J. Colman—I find it in market in December; it grows larger than in the East, but not so high in its flavor.

#### BAILLIE'S SWEET.

W. C. Flagg—Has it been tested here?

T. R. Allen—We want to have a fall sweet apple in the family. When people get old they relish sweet apples.

N. J. Colman—I don't think we have sufficient knowledge of the Baillie's Sweet to recommend it.

T. R. Allen—We want to get the knowledge.

Wm. Hadley—We have with us a fall sweet apple—don't know the name; it commences to ripen in October; it bakes well, makes good apple butter and keeps well. I think I have seen the name in Downing. I obtained my trees in Smith's nursery. It cooks as well as any apple from the time of its being ripe. I think it excellent. The Red Sweet Pippin has the flavor of these.

John A. Pettingill—I have an apple (the Pumpkin Sweet); it is as large as the Yellow Bellflower; much like the Fall Pippin; it is as good as the best Sweet Bough I ever ate; don't know its reputation for cooking; I think it good; don't know Lyman's Pumpkin Sweet.

N. J. Colman—I found a fine large apple, much like the Wine Sap, but larger, at the Iron Mountain on a recent visit. I sent it to Dr. Warder; he called it the Red Winter Sweet of Illinois.

John A. Pettingill—It is very dark and very upright in its growth.

## WINE SAP.

N. J. Colman—I think it superior to the Jenetion; a more regular bearer; fine color, and has not the objection of the Jenetion of bearing every alternate year. It does well in every part of the State.

President—It is one of the best apples in Missouri.

E. B. Coleman—This apple put in bins of 1000 bushels, will keep good till spring, while the Jenetion wants to be picked over.

Dr. J. B. H. Beale—We had the Jenetion in the Meramec Society on the 4th of July from the year before.

Jas. J. Kelly—I think the Jenetion will out-keep the Wine Sap.

## PRYOR'S RED.

W. C. Flagg—I have seen this apple ever since I remember; the trees have been set out 40 years; it is not one of the best bearers, but bears quite well every other year; it is our best apple all things considered; it is not as extensively known as some; it is a vigorous grower; seems to bear longer and be harder than many others; the 40 year old trees bear good crops, and are the only ones of the same age that do so. They bear good crops of fruit of excellent quality. It is a much better keeper than is generally said. I keep it till March; recommend it for market and family. I have seen a Red Russet that is like but darker than Pryor's Red. My soil is the white soil of Southern Illinois. The white soil is best for fruit; don't know but there is some clay in the sub-soil—it is upland.

President—Does it blight in your vicinity, as it sometimes does on the Ohio?

W. C. Flagg—Not with me.

N. J. Colman—I have spoken of this apple in the "Valley Farmer." I think it the best flavored apple we have; a moderate bearer. When we take into consideration its excellent quality as a fruit and tree we should place it on the list.

John A. Pettingill—In regard to the blight, as Mr. Flagg suggests, there are two apples much alike. I find this Red Russet does blight. There is a brighter blush upon the Pryor's Red that is not upon the Red Russet. Have eaten them on the 6th of April.

## MICHAEL HENRY PIPPIN.

President—Not quite equal to the White Winter Pearmain in flavor; bears very abundantly; tree a very upright grower, and will never be more than 12 to 14 feet in diameter; the weight of the fruit is so great that the twigs are often permanently bent down; it is an excellent keeper, and is sold in this market in spring at about \$4 per barrel; it is not in eating condition till January, and keeps well till April; it is one of the most profitable fruits that can be planted and is excessively productive.

N. J. Colman—I can endorse all that has been said. It is a much more certain fruit than the Newtown Pippin, which will grow only upon certain soils; it is a better keeper, but not so highly flavored as the Newtown Pippin.

T. B. Allen—I have planted it, but been under a wrong impression as to it.

President—It is a good dessert fruit; good for cooking; a fine market fruit; perhaps the most profitable that comes into this market.

Jas. J. Kelly—I had a conversation with Mr. Buchanan, of Cincinnati; he prefers the Michael Henry Pippin to the White Winter Pearmain.

Dr. Edwards—I requested Mr. Buchanan to give me the best 8 or 10 varieties, and gives it among the best. Mr. Husmann thinks the Michael Henry the best apple, and gentlemen in this county think so.

Carew Sanders thinks the Michael Henry small.

President—It is as large as the White Winter Pearmain; not so large as the Newtown Pippin.

## COLD GRAPERIES.

I am about to build a cold graper; the soil is sandy and very poor. I wish to know 1st, What kind of manure you would recommend, and how much to a space 20 by 40 feet? 2d, What varieties are best for the climate and purpose? I. C. Louisville, Nov. 1861.

The first requisite for a vine border is complete drainage. This may be effected by placing a layer of stone in the bottom of the excavation made for the border, a foot or less in thickness—a ditch a foot deeper and running all around, or across the middle, having been dug and also filled with stone. Gravel or oyster shells may form a layer on the top of the stone, and inverted turf on these will prevent the earth of the border from settling down among the stones. The best material is a thoroughly worked compost of about two-thirds or three-fourths rich pasture loam and turf, with one-third or fourth of short stable manure, and about a fiftieth part of lime or ashes or both. A twentieth part, more or less, of broken bones, will tend to make the bed looser, and will furnish a long continued supply of some fertility. Two feet or so, of this soil, will be thick enough; and it may be partly above and partly below the common surface of the ground. It should be mainly at least, inside the grape-house. It need not be all made the first year, but extended wider as the roots extend; in the course of two or three years. Black Hamburg, Grizzly Frontignan, Black St. Peters, Royal Muscadine, &c., are excellent for a cold house.—[Co. Gent.]

## An Account with the Poultry Yard.

A "Farmer's Wife" sends us the following abstract of her account with the poultry yard:

1861.	Dr.	Cr.
Jan. 1, By stock, 100 hens, at \$2.00 per doz.		\$16.66
" " By stock, 32 turkeys,		21.44
To eggs sold, 37 doz.	\$4.30	
" " 2 doz. turkey's	30	
" eggs used in family, at 8c. per doz.	14.24	
" chickens used in family, 122 at 13c.	15.86	
" turkeys used in family, 18,	12.06	
" chickens sold, 336, at 13 3-10,	44.20	
" 50 turkeys sold for	33.60	
" 114 chickens on hand	17.00	
" 32 turkeys "	21.44	
	\$163.00	
By keeping poultry, 100 bushels corn,		25.00
" coops for chickens,		1.00
" lb. black pepper,		20
" basket for eggs,		25
	64.55	\$64.55
	\$98.49	



### Bee Keepers' Meeting in Cleveland.

The American Bee Keepers' Association held its third annual meeting in Cleveland, commencing on the morning of the 12th of March, and ending on the evening of the 14th. It was more largely attended than any of its previous meetings. Rev. L. L. Langstroth, and other prominent gentlemen were present during its sessions. Prof. J. P. Kirtland presided. The officers elected for the ensuing year are: Dr. J. P. Kirtland, President; Wm. M. Cunningham, Vice-President; J. C. Ely, Recording Secretary; E. T. Sturtevant, Corresponding Secretary, and L. M. Cobe, Treasurer. (The post-office address of the President and Corresponding Secretary is Cleveland). We have not room for the discussion in detail.

**I. The Winter Management of Bees.**—Messrs. Langstroth, Kirtland, Robinson, Merriman of Burton, Twining of Indiana, and S. C. Brown of Portage, took part in the discussion of this topic. Mr. Langstroth had experience with bees in New England, Philadelphia and Southern Ohio, and said what would be good management in one climate, would not be in another of different temperature. He is convinced that if bees have plenty of honey, free intercommunication between the combs, and an upward passage from the hive for the escape of the dampness, caused by their breath, that bees can be wintered in any climate. Unpainted thin wooden hives are better than thick painted ones. Want of communication between the combs has caused the death of many bees. This can be remedied by boring holes through the sides of the hive, and then running a "butter-tryer" through the combs at right angles to the frames. If this is done late in the fall, the holes will not be filled by the bees. Mr. L., to prevent this, has contrived a passage made of thin circular shavings. Prof. Kirtland thinks bees do best out of doors, in thin wooden hives. He would protect the hives from the northern and eastern winds, and hot suns. Ventilation must be good below and above. In his cellar he had kept some hives which were ventilated at the top, but not at the bottom, and carbonic acid gathered in the hive like *damps* in a well, and with like results. The past winter he has had forty-five stocks in a bee-house, and all are doing well. Some swarms, merely covered by dry goods boxes, had wintered perfectly. The boxes were thrown over them to hide them from thieves. Mr. Robinson had three hives *without tops* to them, which have stood all winter near an open window, and the bees are in good condition. Messrs. Merriman and Twining agreed with Messrs. Kirtland and Langstroth in their views. Mr. Brown of Portage, said that he had buried bees which had come out in excellent condition; those so buried consumed only one half the amount of food that those not buried did. He believed that in this changeable climate it was best to bury bees, and that such come out in better condition than bees which are wintered out of doors. He never lost a swarm so buried, except for want of food. Mr. Langstroth entertained the Association by reading some accounts from the French Bee Journal of the calamities to bees in the years

1860 and 1861. It was a dreadful year. Among other statements was one, that out of four hundred and seventy colonies of bees, three hundred and eighty-three died during the winter. Extended statistics were quoted, showing the unprecedented fatality of that winter. He read these accounts to show that disasters should not discourage bee keepers in this country. The bees spoken of, he supposed died of starvation; they had plenty of air. Mr. Langstroth also read an article from the French Bee Journal, giving a report of the Bee Convention in Cleveland in 1860. It commenced as follows: "Young America has Bee Conventions as well as old Europe."

**II. Winter Feeding.**—Mr. Langstroth feeds candy, by laying it on the frames before the honey is exhausted, and prefers it to liquid food. A sponge saturated with liquid honey does excellently. Mr. Merriman thought maple molasses best. Mr. Langstroth, Mr. Sturtevant and Prof. Kirtland strongly recommended rye flour as spring bee food. Mr. L. makes it into a paste with sirup. Prof. Kirtland fed his weak hives in the fall on sugar syrup; this was before fall flowers, and those bees were stimulated to work, and added to their stock of food for winter use. The consequence of such feeding was that the weak hives worked upon the latest sprigs of mignonette in November, and after the strongest hives, which he did not feed, had ceased to work. That was all the winter feeding he did.

**III. Italian Bees.**—All agreed as to the superiority of the Italian over the common black bee. They deserve all the good things that European bee-keepers have said of them, save one. They are not more peaceable, but more *irascible* than the black bee, and their sting is more poisonous. Mr. Langstroth gave it as his experience, and that of some of his friends, that the Italian bees instead of being more peaceable than our common kind, are more irascible (except in the season of honey gathering), and are more difficult to quiet when once excited. The Italian who brought all Mr. Parson's bees, said that our bees are far more peaceable than the black bees of Germany. A German writer, who furnished a valuable article on bee-keeping for the Patent Office Report of 1860, says that our bees are much more easily handled than those of Germany. This accounts for the belief in Germany, that the Italian bees are more peaceable than the black species. The remarks of Prof. Kirtland, seemed to sum up all that other gentlemen had said of the Italian bee. The Dr. prefaced his remarks by saying that he had "no axe to grind," and no bees to sell, and would not have until his experiments had been completed, which would be three or more years. After discussing the good qualities of the Italian bee, he said that it was as much superior to the black bee, as the Short Horn cows and Chester hogs are to the "scrubs" of the country; and that the Italian bee is:—1. Stronger, more active, and resists lake winds and chills better than the common bee. 2. It works more hours every day. 3. It collects more stores. 4. It works upon some flowers which the black bee

cannot operate upon. 5. It breeds more freely. 6. It is more irritable, and its sting more painful. 7. It is more beautiful. 8. It, in short, compares with the common bee as the Short Horn Durham does to the native scrub. The Dr. cautioned against breeding "in-and-in," and he and other gentlemen advised bee-keepers to purchase queens both from the Parsons and Rose stock, to prevent too close breeding.

IV. *Improvements in Hives.*—Six or eight hives were then exhibited and discussed. After this exhibition was concluded, the following topic was taken up:

V. *Is it expedient to destroy Queen bees when they have attained either their third or fourth year of age; and what is the most successful method of raising young queens for supplying their places, and for forming new colonies?* Prof. Kirtland said that after the third year, the queen was nearly worthless, and should be killed and a fertile queen put in her place instantly. So thought Mr. Langstroth; he said a vigorous fertile queen was worth half a swarm. Mr. Sturtevant thought the queen as good in her third year as at any other time; and at four years he would not kill her, unless he knew that he could instantly get a young fertile queen in her stead; the risk was great, for at that season of the year the loss of a week or two was a serious loss; it was an exceedingly difficult matter to have young fertile queens on hand, ready for any emergency.

VI. *Is it profitable to attempt to renovate and cleanse moldy comb for subsequent use, and what are the best methods to accomplish that purpose?*—The unprofitableness of any attempt to renovate damaged comb was generally conceded.

VII. *Hybridization of the Italian and Black Bees.*—This was well discussed. The only sure way to prevent hybridization is to keep them long distances apart.

VIII. *Artificial Swarming.*—Prof. Kirtland cautioned bee-raisers against too frequent division of swarms, or they would destroy all their bees. Mr. Twining thought the proper time for dividing a swarm is when the young queen bee commences piping, and is still capped over. If left alone, the old queen bee will probably attack the young queen, kill it, and then swarm. The young queen should be removed while still capped, with a part of the swarm. The bees would probably swarm on the next day of themselves if this is not done, and therefore no injury can be done by thus swarming artificially. Mr. Langstroth said it sometimes happens that in one district bees will swarm abundantly of themselves, while in another district, not far distant, artificial swarming is necessary. Mr. Brown related his experience, going to show that artificial swarming by the use of movable comb hives, when not overdone, is the best plan. In answer to a question, Mr. Langstroth said that in this climate, one new stock to two old ones would be about the proper increase. In warmer climates, the increase might safely be much greater. This whole subject of artificial swarming is fully discussed in the third edition of "Langstroth's Honey Bee"—a work that no bee-raiser should fail to own. Mr. L. contended

that the apiarian who aims at obtaining much surplus honey at any season cannot usually, at the furthest, more than double his stock; nor even that, unless all are strong, and the season is favorable. If in any season that is not favorable, he attempts a more rapid increase, he must expect no surplus honey, but must even purchase food to keep his bees from starving. The time, care, skill and food required in our uncertain climate for the rapid increase of colonies are so great, that not one bee-keeper in a hundred can make it profitable; while most who attempt it will be sure at the close of the season to find themselves in possession of stocks which have been managed to death. Very rapid multiplication of colonies by artificial processes, Mr. Langstroth pronounced to be a HAZARDOUS SPECULATION sometimes successful, but ordinarily sharing the fate of such speculations.

IX. *Artificial Comb.*—Mr. Samuel Wagner, editor of the *American Bee Journal*, sent a specimen of artificial comb, made by a process which he has patented, which excited great interest, and which promises important results.

X. *Bee Moth.*—Mr. Langstroth said that so long as a colony has a healthy queen, and plenty of stores and bees, it is seldom seriously injured by the moth. He was of opinion that the bee moth was not introduced into the country with the bee, and had long thought that it might have been brought over in the larvæ state by emigrants; and the fact that it first made its appearance at the SEA BOARD, near Boston, confirmed him in his opinion. Two years ago, he saw Mr. Parson's Italian bee-keeper unpack his trunk at Flushing, L. I., and among his clothing and books were a number of larvæ enveloped in their cocoons, and almost ready to hatch. Dr. Kirtland said that in the spring of 1806, while residing in New England, he read an article in the *Boston Patriot* describing the ravages of the bee miller. This was its first introduction into the United States. Within two years of that time the miller had destroyed four-fifths of all the apiaries in that vicinity. The first, the Doctor says, of the moth west of the mountains was in August, 1828, in Mercer Co., Pa. Within another year it spread over Northern Ohio, and in 1831-32 it had reached every part of the State.

XI. *Milk as a Bee-Feed.*—Mr. Langstroth stated that new sweet milk had been recommended as feed for bees. He had not tested its value, but advised a very cautious trial of it. Prof. Kirtland thought that the sugar of milk and albumen might afford nutriment to bees.

The Convention adjourned, to meet in Cleveland the first day of the Ohio State Fair in September, when a very interesting time may be anticipated.—[*Ohio Farmer*.]

THE ROSE SLUG.—H. S. Ramadell writes that he has found great benefit from the application of tobacco stems in repelling this insect. He spread a quantity round roses in the month of October, and no slugs appeared the next season. The tobacco also proved a good manure for the rose shrubs, which were luxuriant the following season.



[Written for the Valley Farmer.]

### THE MEN THAT SUCCEED.

Men succeed when their heart is in the work: it matters little what they are engaged in. Horace Greeley has obtained great notoriety as an editor; James Gordon Bennett as a sensationist; N. P. Willis was born a dandy, and he carried it out even in literature. He has a genius for show, and is necessarily superficial. He has done fine things in "sacred" subjects; has been praised for his pathos; but he will be remembered as the dandy of American literature. That was his genius; that will be his fame. William C. Bryant is the editor of a successful and influential political journal—but he will be remembered only as "the poet of Nature." Any one reading his Forest Hymn, his Waterfowl, and many other poems, will be at once convinced of this. At eighteen he wrote his most popular poem—popular even to this day—and, though on a purely philosophical subject, it showed, unmistakably, his "love of Nature." These men are found in their proper sphere. There are hundreds like them that might be named. There are probably even more who "have missed their vocation;" and they will never do anything out of it—the fish is out of his element. Cicero used the almost unlimited means in his power to elevate his son to a position with himself; but failed. He had not the bent of his father. What he was inclined to he was probably never permitted to follow. Daniel Webster had a penchant for law, and love for argument. The result was, the greatest constitutional lawyer of his time; and, in argument, he had not his peer. He made no better farmer than other men, though he owned and worked a farm; and there are boys in every neighborhood who could beat him at angling, which he also practiced. He was only great in the sphere he loved. Hannibal, Alexander, and Napoleon were generals, nothing more. Who believes they would have made sculptors, orators, or what they were not. Frederick the Great tried it. Voltaire

flattered him into the belief he was a poet. The man entertaining the conceit, spent much of his time in writing ditties, which were as silly and awkward as the military doings of the knight in the play of Henry the Fourth. With the sword, Frederick became "Frederick the Great." Sack made famous the companion of the "Black Prince." It made him jolly, and jolliness was as much the element of Jack Falstaff, as gloominess the characteristic which gave immortality to Byron. Byron tried to write verses (not poetry, because he misconceived the true idea of poetry,) in his Hours of Idleness, and failed. Afterward we find him giving utterance to his own gloomy nature, and, behold! one morning he found himself "famous." Since then, no poet has had the success of Byron. It was Byron in everything he did—Byron and his mistress—Byron the hater of mankind, and the enthusiastic lover of Nature. Newton was idling his time with the apple—for what? Because he loved to idle in that way—trace effect to its cause. It was his love of philosophy, and not chance, that gave us his great discovery—for millions of people before had seen the phenomenon. Had it not been for his great passion, the ruling passion of his life, Petrarch would have never invented the sonnet. He was another Byron, Burns, Dudevant. Poverty could not keep down the exuberance of Burns. Without learning, without advantages of any kind not possessed by all, he made himself a name in literature—we may say the literature of a jargon. It was through this jargon, where he was at home, that he wrought—and for that reason, successfully.

These men's hearts were in their work; they had a genius for it; and succeeded in consequence: not on account of any superior ability. Their relish led them to increased activity and application in their calling. If a man, by nature, is disposed to be wicked, he stands a fair chance to become a bad man. The "Criminal Calendar" chronicles genius in this department. A man should not seek his vocation; the vocation should seek him. And it will not come from afar to find him. It is part of his locality—the nearest thing to him—that which is most like him—that which is *himself*. Success is only the expression of the man: nothing more. When the fop appeared in literature, it was the fop that wrote. When true passion is revealed in a poem or a novel, will any one say it was not in the writer? As well deny the cause of an effect, for we cannot feign true passion. Mere device can never produce nature. Nature alone is the mother of her offspring.



The man, therefore, if he wish to succeed, must be natural, true to himself. Chesterfield was true to himself, when, on his death-bed, he requested the chair to be set for his visitor. Politeness was the ruling passion of his life.

But, the motive may be unworthy; the direction may have an evil tendency. This is a misfortune. It will not do to give effect to degraded passions. Yet, the world is profuse in examples, and often of a high order of genius. For it is always a pleasure to gratify one's bent—whatever direction it may take. Again we say, unfortunate is the man whose inclination is one opposed to equity. His whole life must be one of opposition—opposition to his own evil nature; and the results cannot be expected to be healthy. Nature then must have a hand in the direction. We are creatures, more or less, of her caprice, whatever that may be. We have the choice before us—to oppose the evil, or encourage the good. Some men have no particular bent either for good or evil. They are sluggish, passive in life. There is no great passion animating them; no irresistible motive—no motive at all. These—and the world is full of them—will generally remain what they are, passive to the end, and forgotten afterward. The ancients had an eye to inclination. They always encouraged or restrained, and never forced a vocation upon a child. And where do we find instances of greater individual success than among the ancients. But we are less heedful than they were. Yet

"A man's a man for a' that;"

and the bent will show. There is much stubbornness in its composition; for water *will* run down hill. To try to get up a fictitious inclination, or mistake the true bent, is generally "beating the wind." Still a man of strong general powers, will do much in almost anything. Such a one needs no advice. He will succeed anywhere; eminently nowhere. The sluggard also will not be benefitted, because it is his nature to be sluggish. He succeeds eminently in this. It is only he who has a relish for a particular employment that needs encouragement. And such a one will generally succeed in spite of adverse circumstances. Indeed, circumstances have but little to do in the case. For instance, the post of an editor is not considered a favorable one to fame. Yet the force of a few minds has given a power and prestige to the press that is almost miraculous, and shows what the mere force of genius—of a true relish for a calling—will do.

A man's heart, then, must be in his work.

This will not only make it the more easy, but a positive pleasure—the chief pleasure of life. And he must be in earnest: this will naturally follow. What Leigh Hunt says of the poet is true of the man. "What the poet has to cultivate above all things, is love and truth—what he has to avoid, like poison, is the fleeting and the false. He will get no good by professing to be in earnest at the moment. His earnestness must be innate and habitual; born with him, and felt to be his most precious inheritance." To have a world in earnest, and each following the vocation he loves, and becoming successful in it, is a thing most devoutly to be wished. F. G.

### ATTENTION TO THE FEET.

It is utterly impossible to get well or keep well, unless the feet are kept dry and warm all the time. If they are for the most part cold, there is cough or sore throat, or hoarseness, or sick headache, or some other annoyance.

If cold and dry, the feet should be soaked in hot water for ten minutes every night, and then wiped and dried; rub into them well, ten or fifteen drops of sweet oil; do this patiently with the hands, rubbing the oil into the soles of the feet particularly.

On getting up in the morning dip both feet at once into water as cold as the air of the room, half ankle deep, for a minute in summer; half a minute or less in winter, rubbing one foot with the other, then wipe dry, and if convenient, hold them to the fire, rubbing them with the hand, until perfectly dry and warm in every part.

If the feet are damp and cold, attend only to the morning washings, but always at night remove the stockings, and hold the feet to the fire, rubbing them with the hands for fifteen minutes, and get immediately into bed.

Under any circumstances, as often as the feet are cold enough to attract attention, draw off the stockings, and hold the feet to the fire; if the feet are much inclined to dampness, put on a pair of dry stockings, leaving the damp ones before the fire to be ready for another change.

Some persons' feet are more comfortable, even in winter, in cotton, others in woolen stockings. Each must be guided by his own feelings. Sometimes two pair of thin stockings keep the feet warmer than one pair which are thicker than both. The thin pair may be of the same or different materials, and that which is best next the foot, must be determined by the feelings of the person. Sometimes the feet are rendered more comfortable by basting half an inch thickness of curled hair on a piece of thick cloth, slipping this into the stocking, with the hair next the skin, to be removed at night, and placed before the fire to be perfectly dried by morning.

Persons who walk a great deal during the day, should, on coming home for the night, remove their shoes and stockings, hold the feet to the fire until perfectly dry; put on a dry pair, and wear slippers for the remainder of the evening.

Boots and gaiters keep the feet damp, cold and unclean, by preventing the escape of that insensible perspiration which is always escaping from a healthy foot, and condensing it; hence the old fashioned low shoe is the best for health.

### ALBERT G. GREENE.

The author of "Old Grimes," is Mr. Greene, a lawyer, of Providence, Rhode Island. He has never had his fugitive poems published in a collected form, and may be termed an amateur poet, doing such things as this:

#### TO THE WEATHERCOCK ON OUR STEEPLE.

The dawn has broke, the morn is up,  
Another day begun;  
And there thy poised and gilded spear  
Is flashing in the sun,  
Upon that steep and lofty tower  
Where thou thy watch hast kept,  
A true and faithful sentinel  
While all around thee slept.

For years upon thee, there has poured  
The summer's noon-day heat;  
And through the long, dark starless night,  
The wintry storms have beat;  
But yet thy duty has been done,  
By day and night the same;  
Still hast thou met and faced the storm,  
Whichever way it came.

No chilling blast in wrath has swept  
Along the distant heaven,  
But thou hast watched its onward course  
And distant warning given;  
And when mid-summer's sultry beams  
Oppress all living things,  
Thou dost foretell each breeze that comes  
With health upon its wings.

How oft I've seen, at early dawn,  
Or twilight's quiet hour,  
The swallows, in their joyous glee,  
Come darting round thy tower,  
As if, with thee, to hail the sun  
And catch his earliest light,  
And offer ye the morn's salute,  
Or bid ye both, good-night.

And when, around thee or above,  
No breath of air has stirred,  
Thou seem'st to watch the circling flight  
Of each free, happy bird;  
Till, after twittering round thy head  
In many a merry track,  
The whole delighted company  
Have settled on thy back.

Then, if, perchance, amidst their mirth,  
A gentle breeze has sprung,  
And, prompt to mark its first approach,  
Thy eager form hath swung,  
I've thought I almost heard thee say,  
As far aloft they flew,  
"Now all away! Here ends our play,  
For I have work to do!"

Men slander thee, my honest friend,  
And call thee, in their pride,  
An emblem of their sickness,  
Thou ever-faithful guide.  
Each weak, unstable human mind  
A "weathercock" they call;  
And thus, unthinkingly, mankind  
Abuse thee one and all.

[Written for the Valley Farmer.]

### THE BEARD.

It hurts the eyes to shave. The constant growth of the beard—occasioned by shaving—is a drain on the system. This may seem trifling, but in the long run it will tell. Then, a full-grown beard is graceful, dignified. It is to a man what the mane is to the lion. A smooth face is boyish, womanish. That Nature designed the beard, should be sufficient evidence in its favor. But we have the testimony of all ages. Imagine a Patriarch without a beard, or a Turk. A soldier may be without one, for soldiers are generally young men. Yet no one will deny that a beard makes a better looking soldier. A beard is a protection to the throat, and is recommended as a preventive of sore-throat. It is comfortable. It looks comfortable. It is a "glory" to a man. For centuries civilized people (?) have shaved—in consequence of the whim of a monarch—a boy king, who could not grow a beard. So it is said. But the influence of the boy is passing away; and people once more lay aside the razor. We hope it will be permanent, among civilized, as among heathen nations. It is sometimes good to follow the barbarian, as he follows nature. But vogue is the mighty arbiter; and we are glad for once to see it directed in the right way. We shall soon be able to distinguish between a man and a woman—that is, when the women cease to be boys, and let their hair grow again. What will not style do? We should hate to see it tried in the extreme.

F. G.

### EAT LEISURELY.

If to digest our food we should enjoy it, it should, of course, be taken leisurely, and in a pleasant state of mind. The cheerful society of friends should not be absent. Chatted food, the proverb says, is half digested, and the longer time spent over the meal thus socially enjoyed, has its part in the benefit. Next to anxiety, the worst foe to digestion is hurry; and this for several reasons. The stomach, in its normal action, contracts on each article as it is swallowed, and relaxes again to receive the next. Insufficient time allowed for this, interferes with the rhythm of its movements, and disorders the play of its muscles. Cramps, and painful feelings of distensions could have no more likely cause. That haste cuts short mastication is obvious, and on the perfection of that process, chiefly, depends the rapidity with which the solution of the food can be effected. Again, it creates an artificial thirst, partly by not allowing time for the due admixture of saliva; and above all it deprives us of the natural guide to the proper amount of food, and remits almost to chance a decision than which scarcely any is more important to our well-being. For the natural in-

dication of a sufficiency of food, is the feeling of satisfaction; not satiety, which is always a symptom of excess; but a feeling of perfect comfort, the true luxury of eating. This feeling the hurried eater cannot know; it never exists for him. Either the unnatural violence to the stomach induces a premature feeling of repletion, and stints him to his due supply, or he eats on until the warning (which ever comes too late) of satiety arrests him. But perhaps it is in vain to protest, to hurried men, against hurry in their eating; and it is well, therefore, that there exists a means by which its ill effects may be, to a great degree, escaped. Meat may be eaten rapidly, if cut small, even with very little mastication. Animal food, if well divided, may be, without much risk, almost bolted; but vegetable food may not. The reason of this difference is, that the digestion of the former is carried on entirely by the secretions of the internal organs; that of the latter depends in considerable part upon the action of the saliva.

[Written for the Valley Farmer.]

#### THE SPHERE OF WOMAN.

The strong-minded women have the argument against them, much as we sympathize with their efforts. The woman should be the housekeeper—we want her to be there—we like to see her where Nature has put her—in the midst of her children. She is the *mother*. That should be sufficient argument. There is more truth in what Michelet says of the wife than some critics would like to acknowledge, though they own the appropriateness of the sphere. The wife is feminine, and feminine pursuits should be hers. A man-woman is a monster. An Amazon will do better. But the race is not perpetuated.

Nature has marked the great distinction in the sexes; not only in sex, but otherwise. She has made woman more affectionate than man. This is necessary to maternity. It is so in the whole creation of animated nature. The mother must nourish and protect her offspring, the father provide for them. This is the law of Nature, and we cannot resist it. The attempt will only fail, though some good may be evolved in the process, as in most reformatory movements.

The wife will never be taken from her sphere of household duties, no more than from her duties of maternity. She is gentle, and graceful, and affectionate. She has to do with her little world of family concerns (if not she, who then? the man?); she loves it; men do not. They have their sphere. The man loves, as a flower is loved—with a protecting eye, yet a companionable feeling. The woman looks up, as we look up to a hero. We do so because we feel his superiority; and it is a pleasure to yield such

homage. This is the position of the weaker to the stronger—not perhaps weaker in intellect; certainly not in affection; but weaker, frailer, physically, and in purpose; not necessarily in the social estimation. Of course there are abuses. Might too often claims right. The strong man is tempted to exercise his strength; so the woman her charms. These are failings, and cannot be brought against the rule; they are only the exceptions.

A woman for beauty; a man for strength. The oak and the willow. The one stern and strong and enduring; the other plaintive and graceful: the one weeping over the loved; the other defying adversity. We have often thought the vine a less appropriate emblem than fame has made it. It is too frail; too dependent. It is of a different order—not a *tree*—but in accordance with the sentiment of the age that produced it. It is different now. The reform of the age has affected this department as well as others. The woman—in the clearer light of the age—is seen to be man's equal, save in the distinction of sex, and its concomitants. And this is all the distinction. It is a mere matter of accident. The child is a *child*, with all the human functions, and no one will pretend to dispute these because the child *happens* to be of the one or the other sex. Do we see on what a slight pretext hang the arguments of the inequality of the sexes? As though a mere accident of birth could bring all this about. Why not make a distinction before the child is born? There is none then. Why afterwards? The sex, and the difference resulting from it, is the only difference; and this is extreme—a complete opposite—only, however, as an incident meeting an end, not affecting the character of the species. If you, reader, had been born a woman instead of a man, would you value yourself the less for it? and *vice versa*, the more? The truth is, we are members of the same family, varying in size, complexion, sex, &c., but not as human, rational beings; each assigned to his or her sphere, as people are assigned to the different trades and departments of life. The doctrine is, a place for everything, and everything in its place. F. G.

Never take a wife till thou hast a house to put her in.

The poor have little—beggars, none—the rich, too much—enough, not one.

Old boys have their playthings as well as young ones. The difference is only in the price.

If a man could have his wishes, he would double his trouble.



[Written for the Valley Farmer.]

### PARAGRAPHS.

Happiness is in us, and not in the things around us.

So it is with poetry, which is one kind of happiness. It does not exist in Nature, as many suppose, for Nature is gloomy to the gloomy man. Though the day is never so fair, it is night to the man who is on his way to the gallows. The gloomiest day has a joy for him who is happy at heart.

It is the true art of poetry to learn how to communicate one's happiness. Who can do it? He is the poet—and no other. Hence so many versifiers, and so few poets.

To give pleasure, is pleasure, as well as fame. But the man must learn how to impart it to another. And he can only learn it for himself: no substitute will answer.

The Bible is the concentration of the wisdom of ages—to say nothing of its inspiration. There is hardly a wise saying that is not traceable to this Book. And yet how little is it studied for wisdom? all for religion, and to make creeds of. This is its aspersion, that it gives birth to so many creeds. But this shows also its strength—as from the creator proceeds multiplicity.

The main thing in marriage is its companionship. This missing, marriage is a dearth. Love is the link that binds in communion. But the wisest philosophers say that love steps out when Hymen steps in, leaving only the good qualities to sustain companionship. The truth is, companionship is love, esteem—all. When missing, all these are missed. Call it by what name we may, it is the companionable influence that makes matrimony. "I love," means, "I crave your society." When this society is no more craved, there is an end to love.

To render good for evil is a saying so common that it has lost its force. The moment we attempt its practice, it seems a new thing; and we are surprised that we did not practice it before. The man who carries out the principle in life, is a walking strength; he bears a shield about him. All fear him; and well they may, for he "heaps coals of fire on his enemies' heads." This is his revenge; and it is sweet—it has a clear conscience—and a man has to live with his conscience; they are never to be divorced. How sweet it is to have this companion approve of your course! But how when it disapproves? It is worse than a scold then.

The human system is a machine. Sickness is a jar in it; sometimes stops it; then the work is over. For when that little time piece, the heart, stops ticking it is the last of it, it can never be set to running again. The wonder is that it runs so long without stopping. But it is faithful, in season and out, day and night. In sickness it quickens its beat, as if it would hasten past the period of danger. It never tires; it is never discouraged. At night it keeps watch. It is ever faithful; and would live forever. Its welfare is that of the individual, whose faithful sentinel it is.

Whenever I see a child, I think it is the same child I meet everywhere; for children are alike. They are like a family of flowers of the same kind. A child is a *child* by general acceptance.

F. G.

### PRESENCE OF MIND.

The following hints from Dr. Hall, if remembered and practiced, may prove of great value:

1. If a man faints place him flat on his back and let him alone.

2. If any poison is swallowed drink instantly half a glass of cool water with a heaping teaspoonful each of common salt and ground mustard stirred into it; this vomits soon as it reaches the stomach; but for fear some of the poison still remains, swallow the white of one or two eggs, or drink a cup of strong coffee, these two being antidotes for a greater number of poisons than any dozen other articles known, with the advantage of their always being at hand; if not half a pint of sweet oil, lamp oil, or 'drippings,' especially if they vomit quickly.

3. The best thing to stop the bleeding of a moderate cut instantly, is to cover it profusely with cob-web, or flour and salt, about half-and-half.

4. If the blood comes from a wound by jets or spirts be spry, or the man will die in a few minutes, because an artery is severed; tie a handkerchief loosely around near the part between the wound and the heart! Put a stick between the handkerchief and the skin, twist it around until the blood ceases to flow, and keep it there until the doctor comes; if in a position where the handkerchief cannot be used, press the thumb on the spot near the wound between the wound and heart; increase the pressure until the bleeding ceases (but not lessen that pressure for an instant until the physician arrives), so as to glue up the wound by the coagulation or hardening of the cooling blood.

5. If your clothes take fire slide the hands down the dress, keeping them as close to the body as possible, at the same time sinking to the floor by bending the knees; this has a smothering effect upon the flames; if not extinguished, a great headway is gotten; lie down on the floor, roll over and over, or better envelope yourself in a carpet, rug, bed cloth, or any other garment you can get hold of, always preferring woolen.

6. If the body is tired, rest; if the brain is tired, sleep.

7. If the bowels are loose, lie down in a warm bed, and remain there and eat nothing until you are well.

8. If an action of the bowels does not occur at the usual hour, eat not an atom, until they do act, at least for thirty-six hours, meanwhile drink largely of cold water, or hot teas, and exercise in the open air to the extent of a gentle perspiration, and keep this up until things are rightened; this suggestion, if practiced, would save myriads of lives every year both in the city and in the country.

9. The three best medicines in the world are warmth, abstinence and repose.

## Editor's Table.

**ACKNOWLEDGEMENTS.**—C. L. Hoag, Esq., Nurseryman, Lockport, N. Y. will accept our thanks for a box of Grape Vines, comprising upwards of twenty-five varieties. The plants are strong and healthy and give evidence of proper culture. Mr. Hoag has sold 1000 Delaware grape vines the present spring to our friend, William Hadley, the great peach grower of southern Illinois.

John Smith, Esq., of New Melle, Mo., has favored us with a bottle of syrup from the Sorghum or Imphee variety of cane, he does not state which, and it is decidedly the best article we have yet tasted. There is less acid in the syrup than any we have yet tried. All who have tried it and who are competent to judge, pronounce it excellent. The same gentleman has also favored us with a package of watermelon seeds of a superior variety.

H. B. Vaughan, of Sniabar, Mo., has our thanks for some fine Chufas—which no one would refuse to eat? Why are they not more generally cultivated?

**RAIN, RAIN, RAIN, RAIN.**—Such a season for rain we have not experienced for many a year. It rains daily, almost hourly. It is impossible to advance with spring work. We have never known so little farm work done in this section of the country up to the present writing (April 25th) as there is now. It will be a great drawback on the productions of the West the present year. Farm laborers were exceedingly scarce—but with a favorable season for putting in crops a large breadth might have been planted. But the season has been so unfavorable that even the few laborers could do nothing.

**ORANGE ORANGE HEDGES ON BOTTOM LANDS.**—T. A. Smith inquires if the above hedges will make substantial fences on bottom lands, liable to be overflowed, where the common fences are washed away. We have no experience in the matter: if any of our readers have, we would be glad to have it.

### Dr. Geo. H. Dadd.

In our last issue we announced that this gentleman had removed to St. Louis, intending to make this city his permanent residence. We desire to call the attention of Stockmen particularly to this fact. We ask them not to endanger the lives of valuable animals by employing quacks and pretenders. It is to us a source of great gratification to know that we have one properly educated, scientific, Veterinary Surgeon, in St. Louis. Dr. Dadd's reputation as an eminent Veterinarian extends not only over this continent but throughout Europe. His charges are very reasonable, and having a son who can attend to his business in St. Louis during his absence, he can attend to country business when his services are needed.

We have a valuable article from Dr. Dadd's pen this month, and have the promise of an article from him monthly. This will add another valuable feature to our journal.

**ACKNOWLEDGEMENTS.**—Messrs. Overman and Mann, Nurserymen, at Bloomington, Illinois, will accept our thanks for a bundle of cuttings of the Gray or Powder Willow. These gentlemen are very liberal and reliable nurserymen.

### Cotton Seed.

Notwithstanding every effort, we did not succeed in procuring a supply of Cotton Seed from Tennessee of the growth of 1861. A small amount of seed has been obtained by some parties; but, upon examination, we find it no better than what we have on hand of the growth of 1860. Many were writing for the seed to be sent forthwith, and we were obliged to send it; and to be sure of sending the amount of good seed (as was proposed to be given to certain subscribers), we sent to every person three times the quantity we had promised, and only ask our subscribers to plant very thick, as is always done at the South, and we think they will have a good stand. But don't plant while the ground is wet and cold, or it will be sure to rot. The season is so backward, that we think it better not to plant before the 20th of May. In our March number we gave full directions for planting and cultivating the crop. On account of the wetness of the season, choose a sandy soil, or the dryest location you have.

**FRUIT.**—The prospect for a fine Fruit crop this season has been excellent up to Saturday night last, when in consequence of a heavy frost it is feared that the coming crop may be damaged at least in some localities. It is understood that above the Ohio and Mississippi Rail Road the Peach crop is entirely destroyed. Should this be the case it will be a disappointment to those who have, at great pains and expense, planted orchards and were looking for their first crop this season. In this neighborhood the frost does not seem to have injured the crop perceptibly, owing no doubt to the backwardness of the season. The bloom appears somewhat irregular, but trees not permitted to overbear last season promise an abundant yield.

The Peach crop is a source of revenue to Southern Illinois, and its loss together with the prostration of business and low price of agricultural commodities would be severely felt in Egypt. — [Du Quoin (Ill.) Mining Journal, April 9.]

**OFFICERS OF THE KANSAS STATE AGR. SOC'Y FOR 1862:**—President, Lyman Scott, of Leavenworth county; Secretary, F. G. Adams, of Shawnee; Treasurer, Isaac Garrison, of Shawnee. Executive Committee—E. B. Whitman, of Douglas county; F. P. Baker, of Nemaha; W. A. Shannon, of Lyon; C. B. Lines, of Wabunsee; J. C. Marshall, of Linn; Martin Anderson, of Jackson; Thomas Arnold, of Coffee; J. W. Sponable, of Johnson; Welcome Wells, of Riley; R. A. Vanwinkle, of Atchison.

**WILKES' SPIRIT** is now the only SPIRIT OF THE TIMES in existence, all others having retired from the field, and become merged into the circulation of this Journal. Wilkes' Spirit, from its superb sketches, its theatrical literature and masterly criticisms, its reports of hunting, fishing, and all out-door manly pastimes, has been happily characterized as the "American Gentleman's Newspaper," and as such has united upon its staff all those well-known native contributors and writers, whose healthy, vigorous and original style, braced by the new air of the Western fields and forests, has been distinguished by the name of a distinctive "American literature." Wilkes' Spirit, therefore, which has long been recognised as the only sporting authority in this country, is now without

even a pretended rival; and its chief boast is, that while acquiring its vast circulation, it has earned, by its careful morals, and chaste propriety of language, a respected place on the family center-table. Though it necessarily takes cognisance even of the ruder sports, it invariably puts them upon record without indecency or slang, and thus furnishes the current history of physical impulse, devoid of repulsion or offence. In this connection, we may also say, that no profane or questionable words, or secret medical, or other immoral advertisement, however current in other journals, is ever permitted to obtain admission to its columns. Terms \$3.00 a year in advance. Office No. 201 William Street, New York.

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Hermann, Sept. 1859-tf.

**GEO. H. DADD,  
VETERINARY SURGEON,**Office—At the Stable of Glasgow & Harkness,  
LOCUST STREET, ST. LOUIS, MO.

## REFERENCES:

Thos. Lough, Esq., Agent Adams' Express Co.  
H. C. Creveling, Sup't of Transfer Co.

N. J. Colman, Editor "Valley Farmer."

Messrs. Glasgow &amp; Harkness.

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Having purchased the entire stock of the above Nurseries, will sell during the Spring and fall of 1862, for Cash, at Wholesale or Retail, any of my large stock of Fruit and Ornamental Trees, Shrubs and Plants.

Also large and small Evergreens, in quantity to suit purchasers.

First class Apple Trees at \$50 per 1000, or at retail at 10 cents each. Also Peaches at \$45 per 1000. Other stock equally low, and many kinds of Ornamental Trees and Plants at  $\frac{1}{2}$  their original price. The stock must be sold to clear a portion of the ground.

A. W. MADDOCKS.

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We shall be ready by the middle of APRIL to fill orders for the following PLANTS, well tied up and packed for shipping by express or otherwise:

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Time for setting above, until the last of JUNE.

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PLANT &amp; BROTHER,

April 1, 1862.

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St. Louis, Mo.

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As the under stone revolves, they may be run to a high speed without choking, and having RUBBER SPRINGS, patented by us, they **WILL NOT BURST WHILE RUNNING**, when pieces of iron get between them, as many mills have done on the stiff principle. Our spindles have steel toes and inces, with set screws at both ends, so that the faces of the stones can be kept parallel with each other, and the meal be ground even enough for Flour, which are important improvements, insuring **SAFETY TO THE MILL TENDER**, and good work, and ought to be put in all lower stone mills.

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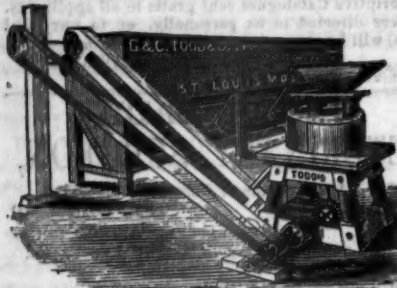
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May '61, 1y.

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